

HYDRAULIC CATALOGUE

Two Piece



WHO WE ARE.

Motion delivers a world-class customer-first approach to everything we do. This has firmly established our business as the leader in the market, providing excellence and expertise in industrial products, solutions and services.

For more than 100 years we have been a feature in the Australian industrial landscape giving customers unmatched products and service through an integrated network of branches, workshops and service centres.

We have an ongoing commitment to invest in our people, facilities, IT and systems to ensure we can continue to offer a broad ranging and premium level of engineering design, servicing and turnkey projects to our customers across Australia.

We are committed and proud to keep our customers in motion, every day of the year.

“WE KEEP THE WORLD MOVING”



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TP - TWO PIECE FITTINGS

FITTING TO SUIT : SAE 100 R3 - EN 854 R3

SAE 100 R4 - Fuel / Oil Suction & Delivery

SAE 100 R5 J1402 DOT ALL FM VSS 106 High Temperature

SAE 100 R6 - EN 854 R6

SAE 100 R6 - EN 854 R6 High Temperature

SAE 100 R7 - EN 855 R7 Thermoplastic

SAE 100 R7 Non-Conductive Thermoplastic

SAE 100 R7 Twin Line Thermoplastic

SAE 100 R8 - EN 855 R8 Thermoplastic

SAE 100 R8 Non-Conductive Thermoplastic

SAE 100 R14 PTFE Stainless Steel

SAE 100 R1AT - EN 853 1SN

SAE 100 R2AT - EN 853 2SN

SAE 100 R16 - EN 857 2SC

SAE 100 R17

SAE 100 R12 - EN 856 R12

TWO PIECE FERRULE TO SUIT - R3 / R4 / R5 - NON SKIVE



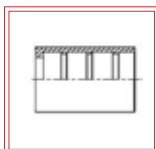
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF1-03	03	3/16"
81-TPF1-04	04	1/4"
81-TPF1-05	05	5/16"
81-TPF1-06	06	3/8"
81-TPF1-08	08	1/2"
81-TPF1-10	10	5/8"
81-TPF1-12	12	3/4"
81-TPF1-16	16	1"
81-TPF1-20	20	1-1/4"
81-TPF1-24	24	1-1/2"
81-TPF1-32	32	2"
81-TPF1-40	40	2-1/2"
81-TPF1-48	48	3"
81-TPF1-64	64	4"

TWO PIECE FERRULE TO SUIT - R6-NON SKIVE / R12-SKIV



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF2-04	04	1/4"
81-TPF2-05	05	5/16"
81-TPF2-06	06	3/8"
81-TPF2-08	08	1/2"
81-TPF2-10	10	5/8"
81-TPF2-12	12	3/4"
81-TPF2-16	16	1"
81-TPF2-20	20	1-1/4"
81-TPF2-24	24	1-1/2"
81-TPF2-32	32	2"

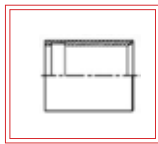
TWO PIECE FERRULE TO SUIT - R7 / R8



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF3-02	02	1/8"
81-TPF3-03	03	3/16"
81-TPF3-04	04	1/4"
81-TPF3-05	05	5/16"
81-TPF3-06	06	3/8"
81-TPF3-08	08	1/2"
81-TPF3-10	10	5/8"
81-TPF3-12	12	3/4"
81-TPF3-16	16	1"
81-TPF3-24	24	1-1/2"

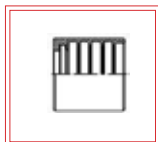
HYDRAULIC TWO PIECE

TWO PIECE FERRULE TO SUIT - R14 / PTFE



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF4-03	03	3/16"
81-TPF4-04	04	1/4"
81-TPF4-05	05	5/16"
81-TPF4-06	06	3/8"
81-TPF4-08	08	1/2"
81-TPF4-10	10	5/8"
81-TPF4-12	12	3/4"
81-TPF4-16	16	1"
81-TPF4-20	20	1-1/4"
81-TPF4-24	24	1-1/2"
81-TPF4-32	32	2"

TWO PIECE FERRULE TO SUIT - 1SN / 2SN / 2SC



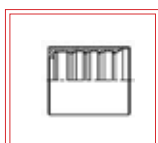
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF5-03	03	3/16"
81-TPF5-04	04	1/4"
81-TPF5-05	05	5/16"
81-TPF5-06	06	3/8"
81-TPF5-08	08	1/2"
81-TPF5-10	10	5/8"
81-TPF5-12	12	3/4"
81-TPF5-16	16	1"
81-TPF5-20	20	1-1/4"
81-TPF5-24	24	1-1/2"
81-TPF5-32	32	2"
81-TPF5-40	40	2-1/2"
81-TPF5-48	48	3"

TWO PIECE FERRULE TO SUIT - R17



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF6-04	04	1/4"
81-TPF6-05	05	5/16"
81-TPF6-06	06	3/8"
81-TPF6-08	08	1/2"
81-TPF6-10	10	5/8"
81-TPF6-12	12	3/4"
81-TPF6-16	16	1"

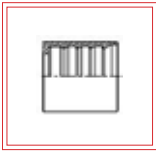
TWO PIECE FERRULE TO SUIT - R12



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF7-06	06	3/8"
81-TPF7-08	08	1/2"
81-TPF7-10	10	5/8"
81-TPF7-12	12	3/4"
81-TPF7-16	16	1"
81-TPF7-20	20	1-1/4"

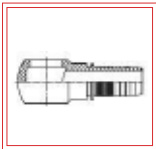
HYDRAULIC TWO PIECE

TWO PIECE FERRULE TO SUIT - 4SP-SKIVE



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TPF8-04	04	1/4"
81-TPF8-06	06	3/8"
81-TPF8-08	08	1/2"
81-TPF8-10	10	5/8"
81-TPF8-12	12	3/4"
81-TPF8-16	16	1"

BSPP BANJO



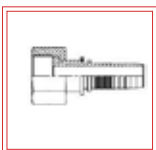
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BBNJ-0404	04	1/4"	04	1/4"-19	0	0	26.5	0.0
81-TP-BBNJ-0406	04	1/4"	06	3/8"-19	0	0	0.0	0.0
81-TP-BBNJ-0506	05	5/16"	06	3/8"-19	0	0	30.5	0.0
81-TP-BBNJ-0606	06	3/8"	06	3/8"-19	0	0	30.5	0.0
81-TP-BBNJ-0608	06	3/8"	08	1/2"-14	0	0	34.5	0.0
81-TP-BBNJ-0808	08	1/2"	08	1/2"-14	0	0	35.0	0.0
81-TP-BBNJ-1010	10	5/8"	10	5/8"-14	0	0	38.0	0.0
81-TP-BBNJ-1212	12	3/4"	12	3/4"-14	0	0	41.5	0.0
81-TP-BBNJ-1616	16	1"	16	1"-11	0	0	50.5	0.0

BSPP BANJO BOLT



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TP-BBNJB-04	04	1/4"
81-TP-BBNJB-06	06	3/8"
81-TP-BBNJB-08	08	1/2"
81-TP-BBNJB-10	10	5/8"
81-TP-BBNJB-12	12	3/4"
81-TP-BBNJB-16	16	1"

BSP FLAT SEAT FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BFFX-0404	04	1/4"	04	1/4"-19	19	0	16.0	0.0
81-TP-BFFX-0606	06	3/8"	06	3/8"-19	22	0	17.0	0.0
81-TP-BFFX-0608	06	3/8"	08	1/2"-14	27	0	17.0	0.0
81-TP-BFFX-0808	08	1/2"	08	1/2"-14	27	0	18.0	0.0
81-TP-BFFX-0812	08	1/2"	12	3/4"-14	32	0	22.0	0.0
81-TP-BFFX-1010	10	5/8"	10	5/8"-14	27	0	17.1	0.0
81-TP-BFFX-1012	10	5/8"	12	3/4"-14	32	0	20.0	0.0
81-TP-BFFX-1212	12	3/4"	12	3/4"-14	32	0	20.6	0.0
81-TP-BFFX-1216	12	3/4"	16	1"-11	38	0	23.0	0.0
81-TP-BFFX-1616	16	1"	16	1"-11	38	0	23.9	0.0

BSP FLAT SEAT MALE

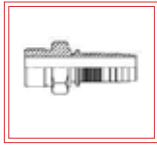


PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BFM-0404	04	1/4"	04	1/4"-19	19	0	26.3	0.0
81-TP-BFM-0606	06	3/8"	06	3/8"-19	22	0	27.8	0.0
81-TP-BFM-0608	06	3/8"	08	1/2"-14	27	0	31.3	0.0

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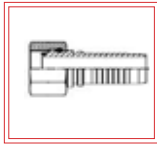
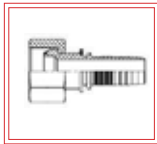
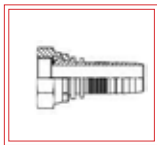
HYDRAULIC TWO PIECE

BSP FLAT SEAT MALE



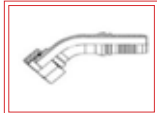
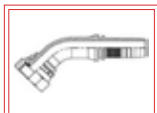
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BFM-0808	08	1/2"	08	1/2"-14	27	0	32.1	0.0
81-TP-BFM-1010	10	5/8"	10	5/8"-14	30	0	36.1	0.0
81-TP-BFM-1212	12	3/4"	12	3/4"-14	32	0	34.6	0.0
81-TP-BFM-1216	12	3/4"	16	1"-11	41	0	39.6	0.0
81-TP-BFM-1616	16	1"	16	1"-11	41	0	40.4	0.0

BSPF FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPFX-0204	02	1/8"	04	1/4"-19	19	0	16.0	0.0
81-TP-BPFX-0302	03	3/16"	02	1/8"-28	14	0	13.8	0.0
81-TP-BPFX-0304	03	3/16"	04	1/4"-19	19	0	16.0	0.0
81-TP-BPFX-0402	04	1/4"	02	1/8"-28	14	0	14.2	0.0
81-TP-BPFX-0404	04	1/4"	04	1/4"-19	19	0	16.0	0.0
81-TP-BPFX-0406	04	1/4"	06	3/8"-19	22	0	16.0	0.0
81-TP-BPFX-0504	05	5/16"	04	1/4"-19	19	0	17.3	0.0
81-TP-BPFX-0506	05	5/16"	06	3/8"-19	22	0	18.0	0.0
81-TP-BPFX-0604	06	3/8"	04	1/4"-19	19	0	17.3	0.0
81-TP-BPFX-0606	06	3/8"	06	3/8"-19	22	0	17.0	0.0
81-TP-BPFX-0608	06	3/8"	08	1/2"-14	27	0	17.0	0.0
81-TP-BPFX-0806	08	1/2"	06	3/8"-19	22	0	18.6	0.0
81-TP-BPFX-0808	08	1/2"	08	1/2"-14	27	0	18.0	0.0
81-TP-BPFX-0810	08	1/2"	10	5/8"-14	27	0	17.0	0.0
81-TP-BPFX-0812	08	1/2"	12	3/4"-14	32	0	22.0	0.0
81-TP-BPFX-1010	10	5/8"	10	5/8"-14	27	0	17.1	0.0
81-TP-BPFX-1012	10	5/8"	12	3/4"-14	32	0	20.0	0.0
81-TP-BPFX-1212	12	3/4"	12	3/4"-14	32	0	20.6	0.0
81-TP-BPFX-1216	12	3/4"	16	1"-11	38	0	23.0	0.0
81-TP-BPFX-1616	16	1"	16	1"-11	38	0	23.9	0.0
81-TP-BPFX-1620	16	1"	20	1-1/4"-11	50	0	30.5	0.0
81-TP-BPFX-2020	20	1-1/4"	20	1-1/4"-11	50	0	32.0	0.0
81-TP-BPFX-2024	20	1-1/4"	24	1-1/2"-11	55	0	41.9	0.0
81-TP-BPFX-2424	24	1-1/2"	24	1-1/2"-11	55	0	33.8	0.0
81-TP-BPFX-2432	24	1-1/2"	32	2"-11	70	0	47.0	0.0
81-TP-BPFX-3232	32	2"	32	2"-11	70	0	34.0	0.0
81-TP-BPFX-4040	40	2-1/2"	40	2-1/2"-11	0	0	0.0	0.0
81-TP-BPFX-4848	48	3"	48	3"-11	100	0	48.5	0.0

BSPF FEMALE 45DEG SWIVEL

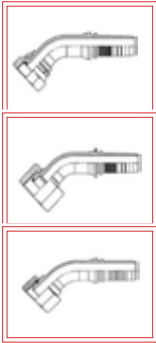


PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPFX45-0404	04	1/4"	04	1/4"-19	19	0	44.5	15.0
81-TP-BPFX45-0406	04	1/4"	06	3/8"-19	22	0	43.0	16.9
81-TP-BPFX45-0506	05	5/16"	06	3/8"-19	22	0	48.0	18.0
81-TP-BPFX45-0606	06	3/8"	06	3/8"-19	22	0	50.0	20.5
81-TP-BPFX45-0608	06	3/8"	08	1/2"-14	27	0	53.5	21.0
81-TP-BPFX45-0806	08	1/2"	06	3/8"-19	22	0	52.0	21.0
81-TP-BPFX45-0808	08	1/2"	08	1/2"-14	27	0	56.0	21.0
81-TP-BPFX45-0810	08	1/2"	10	5/8"-14	27	0	61.0	23.0
81-TP-BPFX45-0812	08	1/2"	12	3/4"-14	32	0	61.0	23.0
81-TP-BPFX45-1010	10	5/8"	10	5/8"-14	27	0	64.0	21.5

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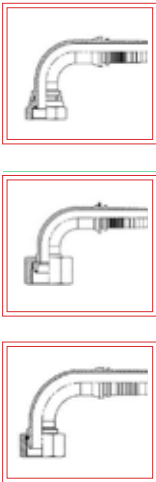
HYDRAULIC TWO PIECE

BSPP FEMALE 45DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPFX45-1012	10	5/8"	12	3/4"-14	32	0	69.0	22.5
81-TP-BPFX45-1212	12	3/4"	12	3/4"-14	32	0	67.6	28.0
81-TP-BPFX45-1216	12	3/4"	16	1"-11	38	0	77.5	31.5
81-TP-BPFX45-1616	16	1"	16	1"-11	38	0	72.5	34.0
81-TP-BPFX45-1620	16	1"	20	1-1/4"-11	50	0	102.0	47.5
81-TP-BPFX45-2020	20	1-1/4"	20	1-1/4"-11	50	0	101.0	40.0
81-TP-BPFX45-2024	20	1-1/4"	24	1-1/2"-11	55	0	118.5	38.0
81-TP-BPFX45-2424	24	1-1/2"	24	1-1/2"-11	55	0	111.0	46.0
81-TP-BPFX45-2432	24	1-1/2"	32	2"-11	70	0	126.5	45.0
81-TP-BPFX45-3232	32	2"	32	2"-11	70	0	154.0	60.0

BSPP FEMALE 90DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPFX90-0302	03	3/16"	02	1/8"-28	14	0	24.0	30.0
81-TP-BPFX90-0304	03	3/16"	04	1/4"-19	19	0	32.6	30.0
81-TP-BPFX90-0404	04	1/4"	04	1/4"-19	19	0	29.3	29.0
81-TP-BPFX90-0406	04	1/4"	06	3/8"-19	22	0	29.8	31.0
81-TP-BPFX90-0506	05	5/16"	06	3/8"-19	22	0	33.2	36.0
81-TP-BPFX90-0606	06	3/8"	06	3/8"-19	22	0	34.8	42.0
81-TP-BPFX90-0608	06	3/8"	08	1/2"-14	27	0	34.3	35.5
81-TP-BPFX90-0808	08	1/2"	08	1/2"-14	27	0	35.8	41.0
81-TP-BPFX90-0810	08	1/2"	10	5/8"-14	27	0	41.6	43.5
81-TP-BPFX90-0812	08	1/2"	12	3/4"-14	32	0	41.8	43.0
81-TP-BPFX90-1010	10	5/8"	10	5/8"-14	27	0	47.9	47.0
81-TP-BPFX90-1012	10	5/8"	12	3/4"-14	32	0	51.9	49.0
81-TP-BPFX90-1212	12	3/4"	12	3/4"-14	32	0	49.1	53.0
81-TP-BPFX90-1216	12	3/4"	16	1"-11	38	0	54.1	60.5
81-TP-BPFX90-1616	16	1"	16	1"-11	38	0	75.1	69.0
81-TP-BPFX90-1620	16	1"	20	1-1/4"-11	50	0	75.1	88.5
81-TP-BPFX90-2020	20	1-1/4"	20	1-1/4"-11	50	0	82.3	83.0
81-TP-BPFX90-2024	20	1-1/4"	24	1-1/2"-11	55	0	101.0	83.0
81-TP-BPFX90-2424	24	1-1/2"	24	1-1/2"-11	55	0	95.7	96.0
81-TP-BPFX90-2432	24	1-1/2"	32	2"-11	70	0	107.8	104.0
81-TP-BPFX90-3232	32	2"	32	2"-11	70	0	128.5	136.0
81-TP-BPFX90-4848	48	3"	48	3"-11	100	0	198.4	206.0

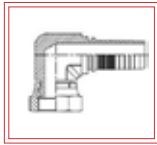
BSPP FEMALE 90DEG SWIVEL LONG DROP



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPFX90L-0808	08	1/2"	08	1/2"-14	27	0	0.0	64.0
81-TP-BPFX90L-1212	12	3/4"	12	3/4"-14	32	0	0.0	95.0

HYDRAULIC TWO PIECE

BSPP FEMALE 90DEG SWIVEL COMPACT



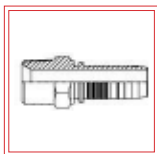
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPFX90C-0404	04	1/4"	04	1/4"-19	19	0	16.8	19.5
81-TP-BPFX90C-0606	06	3/8"	06	3/8"-19	22	0	18.8	22.0
81-TP-BPFX90C-0608	06	3/8"	08	1/2"-14	27	0	21.5	22.5
81-TP-BPFX90C-0808	08	1/2"	08	1/2"-14	27	0	22.6	24.5
81-TP-BPFX90C-1212	12	3/4"	12	3/4"-14	32	0	26.7	31.0
81-TP-BPFX90C-1616	16	1"	16	1"-11	38	0	34.5	27.5

BSPP MALE



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BPM-0302	03	3/16"	02	1/8"-28	14	0	20.3	0.0
81-TP-BPM-0402	04	1/4"	02	1/8"-28	14	0	20.8	0.0
81-TP-BPM-0404	04	1/4"	04	1/4"-19	19	0	26.3	0.0
81-TP-BPM-0406	04	1/4"	06	3/8"-19	22	0	27.8	0.0
81-TP-BPM-0408	04	1/4"	08	1/2"-14	27	0	31.3	0.0
81-TP-BPM-0506	05	5/16"	06	3/8"-19	22	0	27.8	0.0
81-TP-BPM-0508	05	5/16"	08	1/2"-14	27	0	31.3	0.0
81-TP-BPM-0606	06	3/8"	06	3/8"-19	22	0	27.8	0.0
81-TP-BPM-0608	06	3/8"	08	1/2"-14	27	0	31.3	0.0
81-TP-BPM-0806	08	1/2"	06	3/8"-19	22	0	28.6	0.0
81-TP-BPM-0808	08	1/2"	08	1/2"-14	27	0	32.1	0.0
81-TP-BPM-0810	08	1/2"	10	5/8"-14	30	0	34.1	0.0
81-TP-BPM-0812	08	1/2"	12	3/4"-14	32	0	36.1	0.0
81-TP-BPM-1008	10	5/8"	08	1/2"-14	27	0	32.1	0.0
81-TP-BPM-1010	10	5/8"	10	5/8"-14	30	0	34.1	0.0
81-TP-BPM-1012	10	5/8"	12	3/4"-14	32	0	36.1	0.0
81-TP-BPM-1212	12	3/4"	12	3/4"-14	32	0	36.6	0.0
81-TP-BPM-1216	12	3/4"	16	1"-11	41	0	41.6	0.0
81-TP-BPM-1616	16	1"	16	1"-11	41	0	42.4	0.0
81-TP-BPM-1620	16	1"	20	1-1/4"-11	50	0	46.4	0.0
81-TP-BPM-2020	20	1-1/4"	20	1-1/4"-11	50	0	48.0	0.0
81-TP-BPM-2424	24	1-1/2"	24	1-1/2"-11	55	0	51.0	0.0
81-TP-BPM-3232	32	2"	32	2"-11	70	0	56.5	0.0

BSPT MALE



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BTM-0302	03	3/16"	02	1/8"-28	12	0	20.8	0.0
81-TP-BTM-0402	04	1/4"	02	1/8"-28	12	0	21.3	0.0
81-TP-BTM-0404	04	1/4"	04	1/4"-19	17	0	26.8	0.0
81-TP-BTM-0406	04	1/4"	06	3/8"-19	19	0	27.8	0.0
81-TP-BTM-0504	05	5/16"	04	1/4"-19	17	0	26.8	0.0
81-TP-BTM-0506	05	5/16"	06	3/8"-19	19	0	27.8	0.0
81-TP-BTM-0604	06	3/8"	04	1/4"-19	17	0	26.8	0.0
81-TP-BTM-0606	06	3/8"	06	3/8"-19	19	0	27.8	0.0
81-TP-BTM-0608	06	3/8"	08	1/2"-14	22	0	32.3	0.0
81-TP-BTM-0806	08	1/2"	06	3/8"-19	19	0	28.6	0.0
81-TP-BTM-0808	08	1/2"	08	1/2"-14	22	0	33.1	0.0

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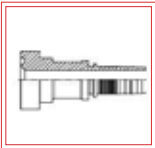
HYDRAULIC TWO PIECE

BSPT MALE



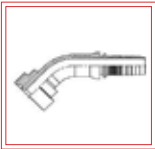
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-BTM-0812	08	1/2"	12	3/4"-14	27	0	35.1	0.0
81-TP-BTM-1012	10	5/8"	12	3/4"-14	27	0	34.1	0.0
81-TP-BTM-1212	12	3/4"	12	3/4"-14	27	0	34.6	0.0
81-TP-BTM-1216	12	3/4"	16	1"-11	36	0	43.6	0.0
81-TP-BTM-1612	16	1"	12	3/4"-14	27	0	37.4	0.0
81-TP-BTM-1616	16	1"	16	1"-11	36	0	44.4	0.0
81-TP-BTM-2020	20	1-1/4"	20	1-1/4"-11	46	0	49.0	0.0
81-TP-BTM-2420	24	1-1/2"	20	1-1/4"-11	50	0	0.0	0.0
81-TP-BTM-2424	24	1-1/2"	24	1-1/2"-11	50	0	50.5	0.0
81-TP-BTM-3232	32	2"	32	2"-11	65	0	54.2	0.0

CATERPILLAR FLANGE



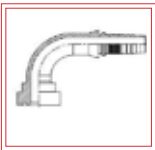
PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-CF-1212	12	3/4"	12	3/4"	41.3	0	57.5	0.0
81-TP-CF-1216	12	3/4"	16	1"	47.6	0	60.5	0.0
81-TP-CF-1612	16	1"	12	3/4"	41.3	0	61.4	0.0
81-TP-CF-1616	16	1"	16	1"	47.6	0	61.4	0.0
81-TP-CF-1620	16	1"	20	1-1/4"	54	0	68.4	0.0
81-TP-CF-2020	20	1-1/4"	20	1-1/4"	54	0	88.0	0.0
81-TP-CF-2024	20	1-1/4"	24	1-1/2"	63.5	0	76.0	0.0
81-TP-CF-2424	24	1-1/2"	24	1-1/2"	63.5	0	106.0	0.0
81-TP-CF-2432	24	1-1/2"	32	2"	79.4	0	81.0	0.0

CATERPILLAR FLANGE 45DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-CF45-1212	12	3/4"	12	3/4"	41.3	0	84.1	31.0
81-TP-CF45-1216	12	3/4"	16	1"	47.6	0	81.0	38.5
81-TP-CF45-1616	16	1"	16	1"	47.6	0	96.7	36.0
81-TP-CF45-1620	16	1"	20	1-1/4"	54	0	96.7	39.0
81-TP-CF45-2020	20	1-1/4"	20	1-1/4"	54	0	108.6	40.0
81-TP-CF45-2024	20	1-1/4"	24	1-1/2"	63.5	0	114.8	45.5
81-TP-CF45-2424	24	1-1/2"	24	1-1/2"	63.5	0	122.9	45.0

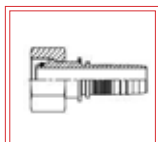
CATERPILLAR FLANGE 90DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-CF90-1216	12	3/4"	16	1"	47.6	0	58.2	66.0
81-TP-CF90-1620	16	1"	20	1-1/4"	54	0	72.6	78.0
81-TP-CF90-2020	20	1-1/4"	20	1-1/4"	54	0	89.5	89.0
81-TP-CF90-2024	20	1-1/4"	24	1-1/2"	63.5	0	93.0	94.0
81-TP-CF90-2424	24	1-1/2"	24	1-1/2"	63.5	0	94.6	105.0

HYDRAULIC TWO PIECE

METRIC DIN 24DEG HEAVY FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DHFX-0316	03	3/16"	16	16x1.5	19	0	27.2	0.0
81-TP-DHFX-0414	04	1/4"	14	14x1.5	17	0	26.4	0.0
81-TP-DHFX-0416	04	1/4"	16	16x1.5	19	0	27.7	0.0
81-TP-DHFX-0418	04	1/4"	18	18x1.5	24	0	27.6	0.0
81-TP-DHFX-0518	05	5/16"	18	18x1.5	24	0	27.6	0.0
81-TP-DHFX-0520	05	5/16"	20	20x1.5	24	0	27.6	0.0
81-TP-DHFX-0616	06	3/8"	16	16x1.5	19	0	27.1	0.0
81-TP-DHFX-0618	06	3/8"	18	18x1.5	24	0	28.0	0.0
81-TP-DHFX-0620	06	3/8"	20	20x1.5	24	0	27.6	0.0
81-TP-DHFX-0622	06	3/8"	22	22x1.5	27	0	31.1	0.0
81-TP-DHFX-0822	08	1/2"	22	22x1.5	27	0	28.2	0.0
81-TP-DHFX-0824	08	1/2"	24	24x1.5	30	0	31.7	0.0
81-TP-DHFX-1022	10	5/8"	22	22x1.5	27	0	31.1	0.0
81-TP-DHFX-1024	10	5/8"	24	24x1.5	30	0	32.6	0.0
81-TP-DHFX-1030	10	5/8"	30	30x2.0	36	0	36.5	0.0
81-TP-DHFX-1230	12	3/4"	30	30x2.0	36	0	37.0	0.0
81-TP-DHFX-1236	12	3/4"	36	36x2.0	41	0	40.2	0.0
81-TP-DHFX-1242	12	3/4"	42	42x2.0	50	0	43.1	0.0
81-TP-DHFX-1636	16	1"	36	36x2.0	41	0	41.0	0.0
81-TP-DHFX-1642	16	1"	42	42x2.0	50	0	43.1	0.0
81-TP-DHFX-2042	20	1-1/4"	42	42x2.0	50	0	44.7	0.0
81-TP-DHFX-2052	20	1-1/4"	52	52x2.0	60	0	48.1	0.0
81-TP-DHFX-2452	24	1-1/2"	52	52x2.0	60	0	48.1	0.0

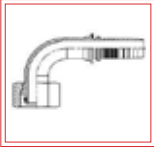
METRIC DIN 24DEG HEAVY FEMALE 45DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DHFX45-0414	04	1/4"	14	14x1.5	17	0	47.0	20.0
81-TP-DHFX45-0416	04	1/4"	16	16x1.5	19	0	48.6	16.0
81-TP-DHFX45-0418	04	1/4"	18	18x1.5	24	0	43.5	19.1
81-TP-DHFX45-0520	05	5/16"	20	20x1.5	24	0	48.1	21.1
81-TP-DHFX45-0618	06	3/8"	18	18x1.5	24	0	48.1	21.1
81-TP-DHFX45-0620	06	3/8"	20	20x1.5	24	0	50.6	20.1
81-TP-DHFX45-0622	06	3/8"	22	22x1.5	27	0	52.9	21.1
81-TP-DHFX45-0824	08	1/2"	24	24x1.5	30	0	55.8	21.6
81-TP-DHFX45-1024	10	5/8"	24	24x1.5	30	0	60.8	27.4
81-TP-DHFX45-1030	10	5/8"	30	30x2.0	36	0	66.3	30.0
81-TP-DHFX45-1230	12	3/4"	30	30x2.0	36	0	66.1	29.0
81-TP-DHFX45-1236	12	3/4"	36	36x2.0	41	0	69.5	33.0
81-TP-DHFX45-1636	16	1"	36	36x2.0	41	0	89.7	36.0
81-TP-DHFX45-1642	16	1"	42	42x2.0	50	0	110.3	40.4
81-TP-DHFX45-2052	20	1-1/4"	52	52x2.0	60	0	109.0	45.0

HYDRAULIC TWO PIECE

METRIC DIN 24DEG HEAVY FEMALE 90DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DHFX90-0414	04	1/4"	14	14x1.5	17	0	27.3	33.0
81-TP-DHFX90-0416	04	1/4"	16	16x1.5	19	0	32.0	33.0
81-TP-DHFX90-0418	04	1/4"	18	18x1.5	24	0	26.9	34.0
81-TP-DHFX90-0520	05	5/16"	20	20x1.5	24	0	33.2	39.0
81-TP-DHFX90-0618	06	3/8"	18	18x1.5	24	0	31.6	35.0
81-TP-DHFX90-0620	06	3/8"	20	20x1.5	24	0	34.3	38.6
81-TP-DHFX90-0622	06	3/8"	22	22x1.5	27	0	34.3	40.4
81-TP-DHFX90-0818	08	1/2"	18	18x1.5	24	0	33.3	35.0
81-TP-DHFX90-0822	08	1/2"	22	22x1.5	27	0	43.2	43.5
81-TP-DHFX90-0824	08	1/2"	24	24x1.5	30	0	39.9	41.4
81-TP-DHFX90-0830	08	1/2"	30	30x2.0	36	0	45.8	50.0
81-TP-DHFX90-1030	10	5/8"	30	30x2.0	36	0	47.9	55.1
81-TP-DHFX90-1230	12	3/4"	30	30x2.0	36	0	50.6	58.0
81-TP-DHFX90-1236	12	3/4"	36	36x2.0	41	0	50.6	59.4
81-TP-DHFX90-1242	12	3/4"	42	42x2.0	50	0	75.6	62.0
81-TP-DHFX90-1636	16	1"	36	36x2.0	41	0	77.6	73.5
81-TP-DHFX90-1642	16	1"	42	42x2.0	50	0	75.6	79.0
81-TP-DHFX90-2042	20	1-1/4"	42	42x2.0	50	0	95.0	88.0
81-TP-DHFX90-2052	20	1-1/4"	52	52x2.0	60	0	94.0	92.0

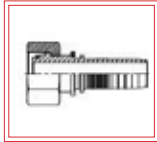
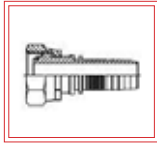
METRIC DIN 24DEG HEAVY MALE



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DHM-0414	04	1/4"	14	14x1.5	14	0	23.3	0.0
81-TP-DHM-0416	04	1/4"	16	16x1.5	17	0	24.2	0.0
81-TP-DHM-0418	04	1/4"	18	18x1.5	19	0	25.2	0.0
81-TP-DHM-0520	05	5/16"	20	20x1.5	22	0	25.2	0.0
81-TP-DHM-0616	06	3/8"	16	16x1.5	17	0	24.3	0.0
81-TP-DHM-0618	06	3/8"	18	18x1.5	19	0	25.3	0.0
81-TP-DHM-0620	06	3/8"	20	20x1.5	22	0	25.4	0.0
81-TP-DHM-0622	06	3/8"	22	22x1.5	22	0	27.4	0.0
81-TP-DHM-0822	08	1/2"	22	22x1.5	22	0	28.1	0.0
81-TP-DHM-0824	08	1/2"	24	24x1.5	24	0	29.0	0.0
81-TP-DHM-0830	08	1/2"	30	30x2.0	36	0	33.1	0.0
81-TP-DHM-1024	10	5/8"	24	24x1.5	24	0	29.1	0.0
81-TP-DHM-1030	10	5/8"	30	30x2.0	36	0	33.1	0.0
81-TP-DHM-1230	12	3/4"	30	30x2.0	36	0	33.7	0.0
81-TP-DHM-1236	12	3/4"	36	36x2.0	46	0	37.7	0.0
81-TP-DHM-1636	16	1"	36	36x2.0	46	0	38.4	0.0
81-TP-DHM-1642	16	1"	42	42x2.0	50	0	42.4	0.0
81-TP-DHM-2052	20	1-1/4"	52	52x2.0	60	0	48.0	0.0

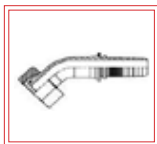
HYDRAULIC TWO PIECE

METRIC DIN 24DEG LIGHT FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DLFX-0312	03	3/16"	12	12x1.5	14	0	23.9	0.0
81-TP-DLFX-0314	03	3/16"	14	14x1.5	17	0	23.9	0.0
81-TP-DLFX-0412	04	1/4"	12	12x1.5	14	0	24.8	0.0
81-TP-DLFX-0414	04	1/4"	14	14x1.5	17	0	24.4	0.0
81-TP-DLFX-0416	04	1/4"	16	16x1.5	19	0	25.4	0.0
81-TP-DLFX-0418	04	1/4"	18	18x1.5	24	0	25.4	0.0
81-TP-DLFX-0516	05	5/16"	16	16x1.5	19	0	25.4	0.0
81-TP-DLFX-0518	05	5/16"	18	18x1.5	24	0	25.4	0.0
81-TP-DLFX-0616	06	3/8"	16	16x1.5	19	0	25.4	0.0
81-TP-DLFX-0618	06	3/8"	18	18x1.5	24	0	25.4	0.0
81-TP-DLFX-0622	06	3/8"	22	22x1.5	27	0	27.4	0.0
81-TP-DLFX-0818	08	1/2"	18	18x1.5	24	0	28.1	0.0
81-TP-DLFX-0822	08	1/2"	22	22x1.5	27	0	28.2	0.0
81-TP-DLFX-0826	08	1/2"	26	26x1.5	32	0	29.2	0.0
81-TP-DLFX-1026	10	5/8"	26	26x1.5	32	0	29.2	0.0
81-TP-DLFX-1030	10	5/8"	30	30x2.0	36	0	31.2	0.0
81-TP-DLFX-1226	12	3/4"	26	26x1.5	32	0	30.2	0.0
81-TP-DLFX-1230	12	3/4"	30	30x2.0	36	0	31.7	0.0
81-TP-DLFX-1236	12	3/4"	36	36x2.0	41	0	32.8	0.0
81-TP-DLFX-1630	16	1"	30	30x2.0	36	0	44.6	0.0
81-TP-DLFX-1636	16	1"	36	36x2.0	41	0	33.6	0.0
81-TP-DLFX-1645	16	1"	45	45x2.0	50	0	38.5	0.0
81-TP-DLFX-2036	20	1-1/4"	36	36x2.0	41	0	38.6	0.0
81-TP-DLFX-2045	20	1-1/4"	45	45x2.0	50	0	40.1	0.0
81-TP-DLFX-2052	20	1-1/4"	52	52x2.0	60	0	40.5	0.0
81-TP-DLFX-2452	24	1-1/2"	52	52x2.0	60	0	40.5	0.0

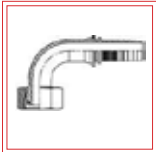
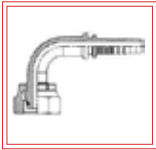
METRIC DIN 24DEG LIGHT FEMALE 45DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DLFX45-0312	03	3/16"	12	12x1.5	14	0	44.9	19.0
81-TP-DLFX45-0412	04	1/4"	12	12x1.5	14	0	45.2	15.5
81-TP-DLFX45-0414	04	1/4"	14	14x1.5	17	0	42.9	17.5
81-TP-DLFX45-0416	04	1/4"	16	16x1.5	22	0	41.9	20.1
81-TP-DLFX45-0516	05	5/16"	16	16x1.5	22	0	47.5	20.1
81-TP-DLFX45-0616	06	3/8"	16	16x1.5	22	0	42.1	18.6
81-TP-DLFX45-0618	06	3/8"	18	18x1.5	24	0	46.8	19.6
81-TP-DLFX45-0822	08	1/2"	22	22x1.5	27	0	55.1	21.1
81-TP-DLFX45-0826	08	1/2"	26	26x1.5	32	0	51.9	21.4
81-TP-DLFX45-1026	10	5/8"	26	26x1.5	32	0	65.0	23.9
81-TP-DLFX45-1230	12	3/4"	30	30x2.0	36	0	69.1	32.0
81-TP-DLFX45-1636	16	1"	36	36x2.0	41	0	91.0	32.0
81-TP-DLFX45-2045	20	1-1/4"	45	45x2.0	50	0	141.5	45.0
81-TP-DLFX45-2452	24	1-1/2"	52	52x2.0	60	0	114.1	47.0

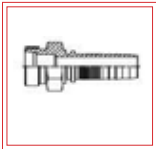
HYDRAULIC TWO PIECE

METRIC DIN 24DEG LIGHT FEMALE 90DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DLFX90-0312	03	3/16"	12	12x1.5	14	0	24.0	34.0
81-TP-DLFX90-0412	04	1/4"	12	12x1.5	14	0	29.5	25.9
81-TP-DLFX90-0414	04	1/4"	14	14x1.5	17	0	28.3	32.5
81-TP-DLFX90-0416	04	1/4"	16	16x1.5	19	0	28.3	32.5
81-TP-DLFX90-0418	04	1/4"	18	18x1.5	24	0	28.8	35.0
81-TP-DLFX90-0516	05	5/16"	16	16x1.5	19	0	33.7	38.0
81-TP-DLFX90-0518	05	5/16"	18	18x1.5	24	0	32.2	40.0
81-TP-DLFX90-0616	06	3/8"	16	16x1.5	19	0	32.8	38.0
81-TP-DLFX90-0618	06	3/8"	18	18x1.5	24	0	32.8	39.1
81-TP-DLFX90-0822	08	1/2"	22	22x1.5	27	0	39.9	40.4
81-TP-DLFX90-0826	08	1/2"	26	26x1.5	32	0	39.8	41.0
81-TP-DLFX90-1026	10	5/8"	26	26x1.5	32	0	51.4	48.0
81-TP-DLFX90-1030	10	5/8"	30	30x2.0	36	0	51.3	50.2
81-TP-DLFX90-1226	12	3/4"	26	26x1.5	32	0	52.1	54.0
81-TP-DLFX90-1230	12	3/4"	30	30x2.0	36	0	52.1	58.9
81-TP-DLFX90-1236	12	3/4"	36	36x2.0	41	0	52.1	80.0
81-TP-DLFX90-1630	16	1"	30	30x2.0	36	0	77.6	63.0
81-TP-DLFX90-1636	16	1"	36	36x2.0	41	0	75.0	68.1
81-TP-DLFX90-2036	20	1-1/4"	36	36x2.0	41	0	92.2	86.0
81-TP-DLFX90-2045	20	1-1/4"	45	45x2.0	50	0	90.5	89.0
81-TP-DLFX90-2052	20	1-1/4"	52	52x2.0	60	0	106.5	100.0
81-TP-DLFX90-2452	24	1-1/2"	52	52x2.0	60	0	107.0	97.5

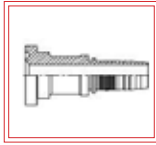
METRIC DIN 24DEG LIGHT MALE



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-DLM-0412	04	1/4"	12	12x1.5	14	0	21.3	0.0
81-TP-DLM-0414	04	1/4"	14	14x1.5	17	0	21.4	0.0
81-TP-DLM-0416	04	1/4"	16	16x1.5	19	0	23.3	0.0
81-TP-DLM-0514	05	5/16"	14	14x1.5	17	0	23.3	0.0
81-TP-DLM-0516	05	5/16"	16	16x1.5	19	0	24.4	0.0
81-TP-DLM-0518	05	5/16"	18	18x1.5	22	0	24.4	0.0
81-TP-DLM-0616	06	3/8"	16	16x1.5	19	0	23.6	0.0
81-TP-DLM-0618	06	3/8"	18	18x1.5	22	0	24.4	0.0
81-TP-DLM-0622	06	3/8"	22	22x1.5	27	0	25.4	0.0
81-TP-DLM-0822	08	1/2"	22	22x1.5	27	0	26.0	0.0
81-TP-DLM-0826	08	1/2"	26	26x1.5	32	0	27.1	0.0
81-TP-DLM-1026	10	5/8"	26	26x1.5	32	0	27.1	0.0
81-TP-DLM-1226	12	3/4"	26	26x1.5	32	0	29.0	0.0
81-TP-DLM-1230	12	3/4"	30	30x2.0	36	0	31.5	0.0
81-TP-DLM-1636	16	1"	36	36x2.0	41	0	34.4	0.0
81-TP-DLM-2045	20	1-1/4"	45	45x2.0	50	0	40.0	0.0
81-TP-DLM-2452	24	1-1/2"	52	52x2.0	60	0	42.0	0.0

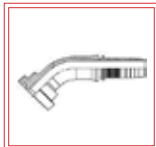
HYDRAULIC TWO PIECE

CODE 62 FLANGE



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FH-0808	08	1/2"	08	1/2"	31.8	0	47.0	0.0
81-TP-FH-0812	08	1/2"	12	3/4"	41.3	0	52.0	0.0
81-TP-FH-1012	10	5/8"	12	3/4"	41.3	0	52.2	0.0
81-TP-FH-1212	12	3/4"	12	3/4"	41.3	0	52.5	0.0
81-TP-FH-1216	12	3/4"	16	1"	47.6	0	55.5	0.0
81-TP-FH-1616	16	1"	16	1"	47.6	0	56.4	0.0
81-TP-FH-1620	16	1"	20	1-1/4"	54	0	63.4	0.0
81-TP-FH-2016	20	1-1/4"	16	1"	47.6	0	63.4	0.0
81-TP-FH-2020	20	1-1/4"	20	1-1/4"	54	0	83.0	0.0
81-TP-FH-2024	20	1-1/4"	24	1-1/2"	63.5	0	71.0	0.0
81-TP-FH-2420	24	1-1/2"	20	1-1/4"	54	0	95.0	0.0
81-TP-FH-2424	24	1-1/2"	24	1-1/2"	63.5	0	101.0	0.0
81-TP-FH-2432	24	1-1/2"	32	2"	79.4	0	76.0	0.0
81-TP-FH-3232	32	2"	32	2"	79.4	0	76.0	0.0

CODE 62 FLANGE 45DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FH45-0808	08	1/2"	08	1/2"	31.8	0	56.5	23.0
81-TP-FH45-0812	08	1/2"	12	3/4"	41.3	0	79.9	30.5
81-TP-FH45-1012	10	5/8"	12	3/4"	41.3	0	69.0	31.0
81-TP-FH45-1016	10	5/8"	16	1"	47.6	0	80.0	33.5
81-TP-FH45-1212	12	3/4"	12	3/4"	41.3	0	84.1	31.0
81-TP-FH45-1216	12	3/4"	16	1"	47.6	0	80.0	33.5
81-TP-FH45-1616	16	1"	16	1"	47.6	0	96.7	36.0
81-TP-FH45-1620	16	1"	20	1-1/4"	54	0	96.1	39.0
81-TP-FH45-2020	20	1-1/4"	20	1-1/4"	54	0	108.6	40.0
81-TP-FH45-2024	20	1-1/4"	24	1-1/2"	63.5	0	114.8	45.5
81-TP-FH45-2424	24	1-1/2"	24	1-1/2"	63.5	0	122.9	45.0
81-TP-FH45-2432	24	1-1/2"	32	2"	79.4	0	133.3	57.5
81-TP-FH45-3232	32	2"	32	2"	79.4	0	156.6	60.0

CODE 62 FLANGE 90DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FH90-0808	08	1/2"	08	1/2"	31.8	0	47.8	46.0
81-TP-FH90-0812	08	1/2"	12	3/4"	41.3	0	47.8	54.0
81-TP-FH90-1008	10	5/8"	08	1/2"	31.8	0	50.4	52.0
81-TP-FH90-1012	10	5/8"	12	3/4"	41.3	0	49.9	55.0
81-TP-FH90-1016	10	5/8"	16	1"	47.6	0	51.4	75.0
81-TP-FH90-1212	12	3/4"	12	3/4"	41.3	0	63.2	61.0
81-TP-FH90-1216	12	3/4"	16	1"	47.6	0	63.2	66.0
81-TP-FH90-1616	16	1"	16	1"	47.6	0	73.6	75.0

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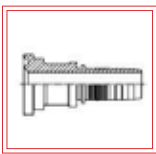
HYDRAULIC TWO PIECE

CODE 62 FLANGE 90DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FH90-1620	16	1"	20	1-1/4"	54	0	77.6	78.0
81-TP-FH90-2016	20	1-1/4"	16	1"	47.6	0	77.6	78.0
81-TP-FH90-2020	20	1-1/4"	20	1-1/4"	54	0	94.5	89.0
81-TP-FH90-2024	20	1-1/4"	24	1-1/2"	63.5	0	98.0	94.0
81-TP-FH90-2424	24	1-1/2"	24	1-1/2"	63.5	0	99.6	105.0
81-TP-FH90-2432	24	1-1/2"	32	2"	79.4	0	116.9	123.0
81-TP-FH90-3232	32	2"	32	2"	79.4	0	143.3	132.0

CODE 61 FLANGE



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL-0808	08	1/2"	08	1/2"	30.2	0	41.0	0.0
81-TP-FL-0812	08	1/2"	12	3/4"	38.1	0	42.0	0.0
81-TP-FL-1012	10	5/8"	12	3/4"	38.1	0	42.2	0.0
81-TP-FL-1016	10	5/8"	16	1"	44.5	0	42.5	0.0
81-TP-FL-1212	12	3/4"	12	3/4"	38.1	0	42.5	0.0
81-TP-FL-1216	12	3/4"	16	1"	44.5	0	50.5	0.0
81-TP-FL-1220	12	3/4"	20	1-1/4"	50.8	0	48.0	0.0
81-TP-FL-1616	16	1"	16	1"	44.5	0	51.4	0.0
81-TP-FL-1620	16	1"	20	1-1/4"	50.8	0	53.9	0.0
81-TP-FL-1624	16	1"	24	1-1/2"	60.3	0	56.9	0.0
81-TP-FL-2016	20	1-1/4"	16	1"	44.5	0	53.0	0.0
81-TP-FL-2020	20	1-1/4"	20	1-1/4"	50.8	0	55.5	0.0
81-TP-FL-2024	20	1-1/4"	24	1-1/2"	60.3	0	58.5	0.0
81-TP-FL-2420	24	1-1/2"	20	1-1/4"	50.8	0	58.5	0.0
81-TP-FL-2424	24	1-1/2"	24	1-1/2"	60.3	0	58.5	0.0
81-TP-FL-2432	24	1-1/2"	32	2"	71.4	0	70.0	0.0
81-TP-FL-3224	32	2"	24	1-1/2"	60.3	0	66.0	0.0
81-TP-FL-3232	32	2"	32	2"	71.4	0	70.0	0.0
81-TP-FL-3240	32	2"	40	2-1/2"	84.1	0	83.0	0.0
81-TP-FL-4032	40	2-1/2"	32	2"	71.4	0	86.5	0.0
81-TP-FL-4040	40	2-1/2"	40	2-1/2"	84.1	0	86.5	0.0
81-TP-FL-4048	40	2-1/2"	48	3"	101.6	0	94.0	0.0
81-TP-FL-4848	48	3"	48	3"	101.6	0	101.6	0.0
81-TP-FL-6464	64	4"	64	4"	127	0	109.1	0.0

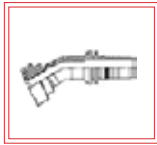
CODE 61 FLANGE 22DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL22-1212	12	3/4"	12	3/4"	38.1	0	84.5	14.0
81-TP-FL22-1216	12	3/4"	16	1"	44.5	0	84.5	14.0
81-TP-FL22-1616	16	1"	16	1"	44.5	0	107.1	14.0
81-TP-FL22-1620	16	1"	20	1-1/4"	50.8	0	107.1	14.0
81-TP-FL22-4040	40	2-1/2"	40	2-1/2"	84.1	0	-	-

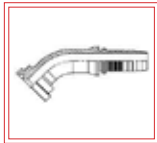
HYDRAULIC TWO PIECE

CODE 61 FLANGE 30DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL30-1212	12	3/4"	12	3/4"	38.1	0	83.0	18.5
81-TP-FL30-1216	12	3/4"	16	1"	44.5	0	83.0	18.5
81-TP-FL30-1616	16	1"	16	1"	44.5	0	105.4	19.0
81-TP-FL30-1620	16	1"	20	1-1/4"	50.8	0	105.4	19.0
81-TP-FL30-2432	24	1-1/2"	32	2"	71.4	0	135.4	30.0
81-TP-FL30-3232	32	2"	32	2"	71.4	0	145.0	32.0

CODE 61 FLANGE 45DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL45-0808	08	1/2"	08	1/2"	30.2	0	52.9	22.0
81-TP-FL45-0812	08	1/2"	12	3/4"	38.1	0	60.3	26.0
81-TP-FL45-1012	10	5/8"	12	3/4"	38.1	0	65.0	26.0
81-TP-FL45-1212	12	3/4"	12	3/4"	38.1	0	73.7	32.0
81-TP-FL45-1216	12	3/4"	16	1"	44.5	0	77.9	29.0
81-TP-FL45-1220	12	3/4"	20	1-1/4"	50.8	0	81.5	30.0
81-TP-FL45-1616	16	1"	16	1"	44.5	0	82.7	33.5
81-TP-FL45-1620	16	1"	20	1-1/4"	50.8	0	82.2	36.0
81-TP-FL45-2016	20	1-1/4"	16	1"	44.5	0	114.6	35.1
81-TP-FL45-2020	20	1-1/4"	20	1-1/4"	50.8	0	95.1	37.5
81-TP-FL45-2024	20	1-1/4"	24	1-1/2"	60.3	0	104.1	40.0
81-TP-FL45-2424	24	1-1/2"	24	1-1/2"	60.3	0	116.7	48.0
81-TP-FL45-2432	24	1-1/2"	32	2"	71.4	0	135.6	55.5
81-TP-FL45-3224	32	2"	24	1-1/2"	60.3	0	128.5	48.0
81-TP-FL45-3232	32	2"	32	2"	71.4	0	140.8	47.5
81-TP-FL45-4040	40	2-1/2"	40	2-1/2"	84.1	0	165.0	55.0
81-TP-FL45-4848	48	3"	48	3"	101.6	0	195.0	65.0

CODE 61 FLANGE 60DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL60-1212	12	3/4"	12	3/4"	38.1	0	88.0	37.1
81-TP-FL60-1216	12	3/4"	16	1"	44.5	0	87.9	44.0
81-TP-FL60-1616	16	1"	16	1"	44.5	0	105.4	44.0
81-TP-FL60-1620	16	1"	20	1-1/4"	50.8	0	106.7	55.0
81-TP-FL60-4040	40	2-1/2"	40	2-1/2"	84.1	0	-	-

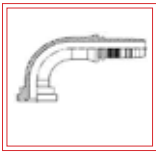
CODE 61 FLANGE 67DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL67-1212	12	3/4"	12	3/4"	38.1	0	80.4	42.0
81-TP-FL67-1216	12	3/4"	16	1"	44.5	0	87.9	51.0
81-TP-FL67-1616	16	1"	16	1"	44.5	0	97.6	61.0
81-TP-FL67-1620	16	1"	20	1-1/4"	50.8	0	98.6	64.0
81-TP-FL67-4040	40	2-1/2"	40	2-1/2"	84.1	0	-	-

HYDRAULIC TWO PIECE

CODE 61 FLANGE 90DEG ELBOW



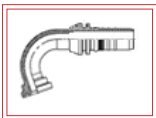
PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL90-0808	08	1/2"	08	1/2"	30.2	0	45.8	42.0
81-TP-FL90-0812	08	1/2"	12	3/4"	38.1	0	45.3	51.0
81-TP-FL90-1012	10	5/8"	12	3/4"	38.1	0	49.4	51.0
81-TP-FL90-1016	10	5/8"	16	1"	44.5	0	66.2	64.5
81-TP-FL90-1212	12	3/4"	12	3/4"	38.1	0	59.7	58.0
81-TP-FL90-1216	12	3/4"	16	1"	44.5	0	66.2	64.5
81-TP-FL90-1220	12	3/4"	20	1-1/4"	50.8	0	69.7	60.0
81-TP-FL90-1616	16	1"	16	1"	44.5	0	70.6	67.0
81-TP-FL90-1620	16	1"	20	1-1/4"	50.8	0	73.6	71.0
81-TP-FL90-1624	16	1"	24	1-1/2"	60.3	0	93.1	75.0
81-TP-FL90-2016	20	1-1/4"	16	1"	44.5	0	94.4	65.0
81-TP-FL90-2020	20	1-1/4"	20	1-1/4"	50.8	0	88.0	84.0
81-TP-FL90-2024	20	1-1/4"	24	1-1/2"	60.3	0	91.5	87.5
81-TP-FL90-2420	24	1-1/2"	20	1-1/4"	50.8	0	93.6	93.0
81-TP-FL90-2424	24	1-1/2"	24	1-1/2"	60.3	0	104.8	91.0
81-TP-FL90-2432	24	1-1/2"	32	2"	71.4	0	104.8	115.0
81-TP-FL90-3224	32	2"	24	1-1/2"	60.3	0	132.8	133.0
81-TP-FL90-3232	32	2"	32	2"	71.4	0	129.3	130.0
81-TP-FL90-4040	40	2-1/2"	40	2-1/2"	84.1	0	160.0	140.0
81-TP-FL90-4048	40	2-1/2"	48	3"	101.6	0	0.0	0.0
81-TP-FL90-4848	48	3"	48	3"	101.6	0	190.0	170.0

CODE 61 FLANGE 90DEG ELBOW LONG DROP



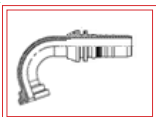
PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL90L-1212-100	12	3/4"	12	3/4"	38.1	0	59.7	100.0
81-TP-FL90L-1212-125	12	3/4"	12	3/4"	38.1	0	59.7	125.0
81-TP-FL90L-1616-120	16	1"	16	1"	44.5	0	70.6	120.0

CODE 61 FLANGE 110DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL110-1212	12	3/4"	12	3/4"	38.1	0	63.9	70.1
81-TP-FL110-1616	16	1"	16	1"	44.5	0	96.8	79.0
81-TP-FL110-1620	16	1"	20	1-1/4"	50.8	0	-	-

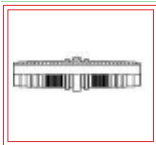
CODE 61 FLANGE 135DEG ELBOW



PART NUMBER	HOSE		FLANGE		FLANGE	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-FL135-1212	12	3/4"	12	3/4"	38.1	0	-	-
81-TP-FL135-2424	24	1-1/2"	24	1-1/2"	60.3	0	-	-

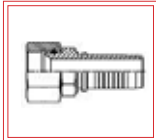
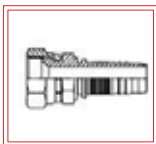
HYDRAULIC TWO PIECE

HOSE MENDER / JOINER



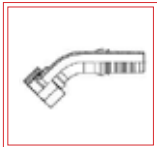
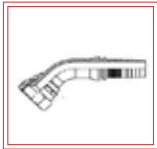
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TP-HM-0404	04	1/4"
81-TP-HM-0505	05	5/16"
81-TP-HM-0606	06	3/8"
81-TP-HM-0808	08	1/2"
81-TP-HM-1010	10	5/8"
81-TP-HM-1212	12	3/4"
81-TP-HM-1616	16	1"
81-TP-HM-2020	20	1-1/4"
81-TP-HM-2424	24	1-1/2"
81-TP-HM-3232	32	2"

JIC 37DEG FLARE FEMALE SWIVEL DH



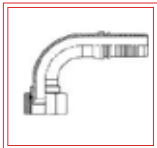
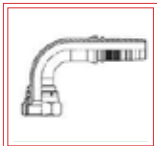
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCFX-0204	02	1/8"	04	7/16"-20	16	14	18.1	0.0
81-TP-JCFX-0304	03	3/16"	04	7/16"-20	16	14	18.1	0.0
81-TP-JCFX-0404	04	1/4"	04	7/16"-20	16	14	19.6	0.0
81-TP-JCFX-0405	04	1/4"	05	1/2"-20	17	14	20.3	0.0
81-TP-JCFX-0406	04	1/4"	06	9/16"-18	19	14	20.3	0.0
81-TP-JCFX-0505	05	5/16"	05	1/2"-20	17	14	20.3	0.0
81-TP-JCFX-0506	05	5/16"	06	9/16"-18	19	14	20.3	0.0
81-TP-JCFX-0606	06	3/8"	06	9/16"-18	19	14	21.3	0.0
81-TP-JCFX-0608	06	3/8"	08	3/4"-16	25	19	24.8	0.0
81-TP-JCFX-0610	06	3/8"	10	7/8"-14	27	22	25.8	0.0
81-TP-JCFX-0806	08	1/2"	06	9/16"-18	19	14	23.1	0.0
81-TP-JCFX-0808	08	1/2"	08	3/4"-16	25	19	25.6	0.0
81-TP-JCFX-0810	08	1/2"	10	7/8"-14	27	22	26.6	0.0
81-TP-JCFX-0812	08	1/2"	12	1-1/16"-12	32	25	28.1	0.0
81-TP-JCFX-1006	10	5/8"	06	9/16"-18	19	14	24.1	0.0
81-TP-JCFX-1008	10	5/8"	08	3/4"-16	25	19	26.6	0.0
81-TP-JCFX-1010	10	5/8"	10	7/8"-14	27	22	27.6	0.0
81-TP-JCFX-1012	10	5/8"	12	1-1/16"-12	32	25	28.1	0.0
81-TP-JCFX-1210	12	3/4"	10	7/8"-14	27	22	28.1	0.0
81-TP-JCFX-1212	12	3/4"	12	1-1/16"-12	32	25	28.6	0.0
81-TP-JCFX-1214	12	3/4"	14	1-3/16"-12	36	32	29.9	0.0
81-TP-JCFX-1216	12	3/4"	16	1-5/16"-12	38	32	32.1	0.0
81-TP-JCFX-1612	16	1"	12	1-1/16"-12	32	25	31.4	0.0
81-TP-JCFX-1616	16	1"	16	1-5/16"-12	38	32	32.9	0.0
81-TP-JCFX-1620	16	1"	20	1-5/8"-12	50	41	37.5	0.0
81-TP-JCFX-2016	20	1-1/4"	16	1-5/16"-12	38	32	37.5	0.0
81-TP-JCFX-2020	20	1-1/4"	20	1-5/8"-12	50	41	39.1	0.0
81-TP-JCFX-2024	20	1-1/4"	24	1-7/8"-12	55	50	43.4	0.0
81-TP-JCFX-2424	24	1-1/2"	24	1-7/8"-12	55	50	43.4	0.0
81-TP-JCFX-3232	32	2"	32	2-1/2"-12	70	65	49.0	0.0
81-TP-JCFX-4040	40	2-1/2"	40	3"-12	90	0	41.5	0.0

JIC 37DEG FLARE FEMALE 45DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCFX45-0304	03	3/16"	04	7/16"-20	16	0	37.1	10.0
81-TP-JCFX45-0404	04	1/4"	04	7/16"-20	16	0	36.6	10.0
81-TP-JCFX45-0405	04	1/4"	05	1/2"-20	17	0	37.2	12.0
81-TP-JCFX45-0406	04	1/4"	06	9/16"-18	19	0	39.4	11.0
81-TP-JCFX45-0505	05	5/16"	05	1/2"-20	17	0	39.8	12.0
81-TP-JCFX45-0506	05	5/16"	06	9/16"-18	19	0	42.8	12.0
81-TP-JCFX45-0606	06	3/8"	06	9/16"-18	19	0	46.3	11.0
81-TP-JCFX45-0608	06	3/8"	08	3/4"-16	25	0	47.2	15.0
81-TP-JCFX45-0808	08	1/2"	08	3/4"-16	25	0	51.6	15.0
81-TP-JCFX45-0810	08	1/2"	10	7/8"-14	27	0	50.7	16.0
81-TP-JCFX45-0812	08	1/2"	12	1-1/16"-12	32	0	57.0	21.0
81-TP-JCFX45-1010	10	5/8"	10	7/8"-14	27	0	62.2	19.0
81-TP-JCFX45-1012	10	5/8"	12	1-1/16"-12	32	0	68.6	21.0
81-TP-JCFX45-1212	12	3/4"	12	1-1/16"-12	32	0	67.5	21.0
81-TP-JCFX45-1216	12	3/4"	16	1-5/16"-12	38	0	71.4	26.0
81-TP-JCFX45-1612	16	1"	12	1-1/16"-12	32	0	72.4	26.3
81-TP-JCFX45-1616	16	1"	16	1-5/16"-12	38	0	79.4	24.0
81-TP-JCFX45-1620	16	1"	20	1-5/8"-12	50	0	83.8	37.0
81-TP-JCFX45-2020	20	1-1/4"	20	1-5/8"-12	50	0	97.1	37.0
81-TP-JCFX45-2024	20	1-1/4"	24	1-7/8"-12	55	0	104.3	42.0
81-TP-JCFX45-2424	24	1-1/2"	24	1-7/8"-12	55	0	112.7	43.0
81-TP-JCFX45-3232	32	2"	32	2-1/2"-12	70	0	159.9	67.0

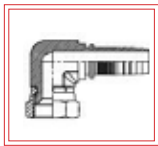
JIC 37DEG FLARE FEMALE 90DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCFX90-0304	03	3/16"	04	7/16"-20	16	0	33.5	32.0
81-TP-JCFX90-0404	04	1/4"	04	7/16"-20	16	0	34.2	32.0
81-TP-JCFX90-0405	04	1/4"	05	1/2"-20	17	0	25.7	30.0
81-TP-JCFX90-0406	04	1/4"	06	9/16"-18	19	0	28.5	38.0
81-TP-JCFX90-0505	05	5/16"	05	1/2"-20	17	0	34.2	32.0
81-TP-JCFX90-0506	05	5/16"	06	9/16"-18	19	0	33.2	35.0
81-TP-JCFX90-0606	06	3/8"	06	9/16"-18	19	0	31.3	35.0
81-TP-JCFX90-0608	06	3/8"	08	3/4"-16	25	0	39.5	41.0
81-TP-JCFX90-0610	06	3/8"	10	7/8"-14	27	0	42.1	46.0
81-TP-JCFX90-0808	08	1/2"	08	3/4"-16	25	0	37.2	40.0
81-TP-JCFX90-0810	08	1/2"	10	7/8"-14	27	0	43.3	47.0
81-TP-JCFX90-0812	08	1/2"	12	1-1/16"-12	32	0	41.8	45.5
81-TP-JCFX90-1010	10	5/8"	10	7/8"-14	27	0	49.4	48.0
81-TP-JCFX90-1012	10	5/8"	12	1-1/16"-12	32	0	47.9	58.0
81-TP-JCFX90-1212	12	3/4"	12	1-1/16"-12	32	0	52.4	54.0
81-TP-JCFX90-1216	12	3/4"	16	1-5/16"-12	38	0	52.6	72.0
81-TP-JCFX90-1616	16	1"	16	1-5/16"-12	38	0	72.6	71.5
81-TP-JCFX90-1620	16	1"	20	1-5/8"-12	50	0	72.6	78.0
81-TP-JCFX90-2020	20	1-1/4"	20	1-5/8"-12	50	0	82.4	78.0
81-TP-JCFX90-2024	20	1-1/4"	24	1-7/8"-12	55	0	87.3	82.0
81-TP-JCFX90-2424	24	1-1/2"	24	1-7/8"-12	55	0	95.3	92.0
81-TP-JCFX90-3232	32	2"	32	2-1/2"-12	70	0	129.5	140.0

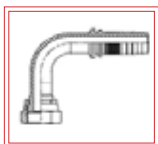
HYDRAULIC TWO PIECE

JIC 37DEG FLARE FEMALE 90DEG SWIVEL COMPACT



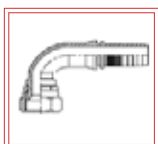
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCFX90C-0404	04	1/4"	04	7/16"-20	16	0	16.8	19.5
81-TP-JCFX90C-0406	04	1/4"	06	9/16"-18	19	0	19.5	21.0
81-TP-JCFX90C-0606	06	3/8"	06	9/16"-18	19	0	18.8	22.0
81-TP-JCFX90C-0608	06	3/8"	08	3/4"-16	25	0	21.5	22.5
81-TP-JCFX90C-0808	08	1/2"	08	3/4"-16	25	0	22.6	24.5
81-TP-JCFX90C-0810	08	1/2"	10	7/8"-14	27	0	23.8	27.0
81-TP-JCFX90C-1212	12	3/4"	12	1-1/16"-12	32	0	26.7	31.0
81-TP-JCFX90C-1616	16	1"	16	1-5/16"-12	38	0	34.5	27.5

JIC 37DEG FLARE FEMALE 90DEG SWIVEL LONG DROP



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCFX90L-0404	04	1/4"	04	7/16"-20	16	0	30.8	46.0
81-TP-JCFX90L-0405	04	1/4"	05	1/2"-20	17	0	31.3	45.0
81-TP-JCFX90L-0406	04	1/4"	06	9/16"-18	19	0	34.3	54.0
81-TP-JCFX90L-0506	05	5/16"	06	9/16"-18	19	0	36.2	54.0
81-TP-JCFX90L-0606	06	3/8"	06	9/16"-18	19	0	43.3	54.0
81-TP-JCFX90L-0608	06	3/8"	08	3/4"-16	25	0	46.8	64.0
81-TP-JCFX90L-0808	08	1/2"	08	3/4"-16	25	0	49.9	64.0
81-TP-JCFX90L-0810	08	1/2"	10	7/8"-14	27	0	37.3	65.0
81-TP-JCFX90L-1010	10	5/8"	10	7/8"-14	27	0	49.9	65.0
81-TP-JCFX90L-1012	10	5/8"	12	1-1/16"-12	32	0	49.9	96.0
81-TP-JCFX90L-1212	12	3/4"	12	1-1/16"-12	32	0	54.1	95.0
81-TP-JCFX90L-1216	12	3/4"	16	1-5/16"-12	38	0	54.1	114.0
81-TP-JCFX90L-1616	16	1"	16	1-5/16"-12	38	0	78.6	114.0

JIC 37DEG FLARE FEMALE 90DEG SWIVEL SHORT DROP



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCFX90S-0404	04	1/4"	04	7/16"-20	16	0	27.0	21.0
81-TP-JCFX90S-0405	04	1/4"	05	1/2"-20	17	0	26.5	23.5
81-TP-JCFX90S-0406	04	1/4"	06	9/16"-18	19	0	31.0	23.0
81-TP-JCFX90S-0506	05	5/16"	06	9/16"-18	19	0	42.7	23.0
81-TP-JCFX90S-0606	06	3/8"	06	9/16"-18	19	0	42.3	23.0
81-TP-JCFX90S-0608	06	3/8"	08	3/4"-16	25	0	48.8	29.0
81-TP-JCFX90S-0808	08	1/2"	08	3/4"-16	25	0	48.0	23.0
81-TP-JCFX90S-0810	08	1/2"	10	7/8"-14	27	0	45.8	32.0
81-TP-JCFX90S-0812	08	1/2"	12	1-1/16"-12	32	0	37.3	46.0
81-TP-JCFX90S-1010	10	5/8"	10	7/8"-14	27	0	36.5	32.0
81-TP-JCFX90S-1012	10	5/8"	12	1-1/16"-12	32	0	47.9	48.0
81-TP-JCFX90S-1212	12	3/4"	12	1-1/16"-12	32	0	58.2	46.0
81-TP-JCFX90S-1216	12	3/4"	16	1-5/16"-12	38	0	53.6	53.0
81-TP-JCFX90S-1616	16	1"	16	1-5/16"-12	38	0	74.0	56.0

HYDRAULIC TWO PIECE

JIC 37DEG FLARE MALE



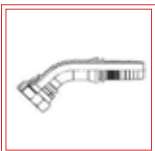
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JCM-0404	04	1/4"	04	7/16"-20	12	0	25.3	0.0
81-TP-JCM-0405	04	1/4"	05	1/2"-20	14	0	25.3	0.0
81-TP-JCM-0406	04	1/4"	06	9/16"-18	17	0	26.3	0.0
81-TP-JCM-0408	04	1/4"	08	3/4"-16	17	0	26.3	0.0
81-TP-JCM-0505	05	5/16"	05	1/2"-20	14	0	25.3	0.0
81-TP-JCM-0506	05	5/16"	06	9/16"-18	17	0	26.3	0.0
81-TP-JCM-0606	06	3/8"	06	9/16"-18	17	0	26.3	0.0
81-TP-JCM-0608	06	3/8"	08	3/4"-16	19	0	29.8	0.0
81-TP-JCM-0610	06	3/8"	10	7/8"-14	24	0	33.8	0.0
81-TP-JCM-0808	08	1/2"	08	3/4"-16	19	0	30.6	0.0
81-TP-JCM-0810	08	1/2"	10	7/8"-14	24	0	34.6	0.0
81-TP-JCM-0812	08	1/2"	12	1-1/16"-12	27	0	37.1	0.0
81-TP-JCM-1010	10	5/8"	10	7/8"-14	24	0	34.6	0.0
81-TP-JCM-1012	10	5/8"	12	1-1/16"-12	27	0	37.1	0.0
81-TP-JCM-1210	12	3/4"	10	7/8"-14	27	0	35.1	0.0
81-TP-JCM-1212	12	3/4"	12	1-1/16"-12	27	0	37.6	0.0
81-TP-JCM-1214	12	3/4"	14	1-3/16"-12	32	0	40.1	0.0
81-TP-JCM-1216	12	3/4"	16	1-5/16"-12	36	0	42.6	0.0
81-TP-JCM-1612	16	1"	12	1-1/16"-12	27	0	40.4	0.0
81-TP-JCM-1616	16	1"	16	1-5/16"-12	36	0	43.4	0.0
81-TP-JCM-1620	16	1"	20	1-5/8"-12	46	0	46.9	0.0
81-TP-JCM-2020	20	1-1/4"	20	1-5/8"-12	46	0	48.5	0.0
81-TP-JCM-2024	20	1-1/4"	24	1-7/8"-12	50	0	52.5	0.0
81-TP-JCM-2424	24	1-1/2"	24	1-7/8"-12	50	0	52.5	0.0
81-TP-JCM-3232	32	2"	32	2-1/2"-12	65	0	62.0	0.0

JIS TYPE F FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JSFX-0404	04	1/4"	04	1/4"-19	19	17	20.8	0.0
81-TP-JSFX-0606	06	3/8"	06	3/8"-19	22	19	21.8	0.0
81-TP-JSFX-0808	08	1/2"	08	1/2"-14	27	22	23.6	0.0
81-TP-JSFX-1212	12	3/4"	12	3/4"-14	32	30	27.1	0.0
81-TP-JSFX-1616	16	1"	16	1"-11	38	36	32.9	0.0

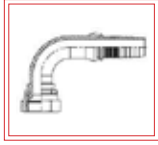
JIS TYPE F FEMALE 45DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JSFX45-0404	04	1/4"	04	1/4"-19	19	0	42.5	15.0
81-TP-JSFX45-0606	06	3/8"	06	3/8"-19	22	0	50.6	16.5
81-TP-JSFX45-0808	08	1/2"	08	1/2"-14	27	0	54.8	18.0
81-TP-JSFX45-1212	12	3/4"	12	3/4"-14	32	0	72.5	22.0
81-TP-JSFX45-1616	16	1"	16	1"-11	38	0	82.0	29.0

HYDRAULIC TWO PIECE

JIS TYPE F FEMALE 90DEG SWIVEL



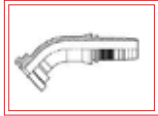
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-JSFX90-0404	04	1/4"	04	1/4"-19	19	0	27.3	29.5
81-TP-JSFX90-0606	06	3/8"	06	3/8"-19	22	0	31.3	33.0
81-TP-JSFX90-0808	08	1/2"	08	1/2"-14	27	0	37.3	36.5
81-TP-JSFX90-1212	12	3/4"	12	3/4"-14	32	0	46.1	52.0
81-TP-JSFX90-1616	16	1"	16	1"-11	38	0	77.1	64.5

KOMATSU FLANGE



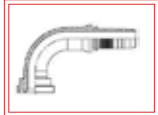
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-KF-1010	10	5/8"	10	5/8"-14	27	0	77.1	0.0

KOMATSU FLANGE 45DEG ELBOW



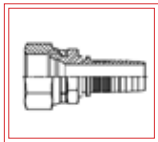
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-KF45-1010	10	5/8"	10	5/8"-14	27	0	77.1	26.0

KOMATSU FLANGE 90DEG ELBOW



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-KF90-1010	10	5/8"	10	5/8"-14	27	0	77.1	51.0

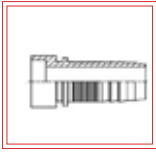
JAPANESE KOMATSU 30DEG FLARE FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-KMFX-0412	04	1/4"	12	12x1.5	17	17	20.3	0.0
81-TP-KMFX-0414	04	1/4"	14	14x1.5	19	17	20.8	0.0
81-TP-KMFX-0416	04	1/4"	16	16x1.5	22	17	21.8	0.0
81-TP-KMFX-0614	06	3/8"	14	14x1.5	19	17	20.8	0.0
81-TP-KMFX-0616	06	3/8"	16	16x1.5	22	17	21.8	0.0
81-TP-KMFX-0618	06	3/8"	18	18x1.5	22	19	21.8	0.0
81-TP-KMFX-0620	06	3/8"	20	20x1.5	27	22	24.3	0.0
81-TP-KMFX-0622	06	3/8"	22	22x1.5	27	22	22.8	0.0
81-TP-KMFX-0818	08	1/2"	18	18x1.5	22	22	22.9	0.0
81-TP-KMFX-0820	08	1/2"	20	20x1.5	27	22	25.1	0.0
81-TP-KMFX-0822	08	1/2"	22	22x1.5	27	22	23.6	0.0
81-TP-KMFX-0824	08	1/2"	24	24x1.5	32	30	27.1	0.0
81-TP-KMFX-1024	10	5/8"	24	24x1.5	32	30	27.1	0.0
81-TP-KMFX-1222	12	3/4"	22	22x1.5	27	27	25.1	0.0
81-TP-KMFX-1224	12	3/4"	24	24x1.5	32	30	27.6	0.0
81-TP-KMFX-1230	12	3/4"	30	30x1.5	36	30	27.6	0.0
81-TP-KMFX-1233	12	3/4"	33	33x1.5	41	36	34.9	0.0
81-TP-KMFX-1633	16	1"	33	33x1.5	41	36	35.7	0.0
81-TP-KMFX-2036	20	1-1/4"	36	36x1.5	46	46	43.5	0.0
81-TP-KMFX-2442	24	1-1/2"	42	42x1.5	55	55	44.0	0.0

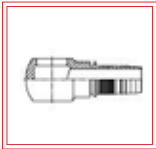
HYDRAULIC TWO PIECE

LIFE SAVER / WELD-ON



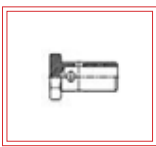
PART NUMBER	HOSE		LIFE SAVER		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-LS-0404	04	1/4"	04	1/4"	0	0	0.0	0.0
81-TP-LS-0505	05	5/16"	05	5/16"	0	0	0.0	0.0
81-TP-LS-0606	06	3/8"	06	3/8"	0	0	0.0	0.0
81-TP-LS-0808	08	1/2"	08	1/2"	0	0	0.0	0.0
81-TP-LS-1010	10	5/8"	10	5/8"	0	0	0.0	0.0
81-TP-LS-1212	12	3/4"	12	3/4"	0	0	0.0	0.0
81-TP-LS-1616	16	1"	16	1"	0	0	0.0	0.0
81-TP-LS-2020	20	1-1/4"	20	1-1/4"	0	0	0.0	0.0
81-TP-LS-2424	24	1-1/2"	24	1-1/2"	0	0	0.0	0.0
81-TP-LS-3232	32	2"	32	2"	0	0	0.0	0.0

METRIC BANJO



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-MBNJ-0410	04	1/4"	10	10x1.5	0	0	25.0	0.0
81-TP-MBNJ-0412	04	1/4"	12	12x1.5	0	0	28.5	0.0
81-TP-MBNJ-0414	04	1/4"	14	14x1.5	0	0	27.5	0.0
81-TP-MBNJ-0512	05	5/16"	12	12x1.5	0	0	28.5	0.0
81-TP-MBNJ-0514	05	5/16"	14	14x1.5	0	0	27.5	0.0
81-TP-MBNJ-0516	05	5/16"	16	16x1.5	0	0	30.5	0.0
81-TP-MBNJ-0614	06	3/8"	14	14x1.5	0	0	27.5	0.0
81-TP-MBNJ-0616	06	3/8"	16	16x1.5	0	0	30.5	0.0
81-TP-MBNJ-0618	06	3/8"	18	18x1.5	0	0	31.5	0.0
81-TP-MBNJ-0818	08	1/2"	18	18x1.5	0	0	32.0	0.0
81-TP-MBNJ-0820	08	1/2"	20	20x1.5	0	0	33.5	0.0
81-TP-MBNJ-0822	08	1/2"	22	22x1.5	0	0	35.0	0.0

METRIC BANJO BOLT



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-TP-MBNJB-10	10	10x1.5
81-TP-MBNJB-12	12	12x1.5
81-TP-MBNJB-14	14	14x1.5
81-TP-MBNJB-16	16	16x1.5
81-TP-MBNJB-18	18	18x1.5
81-TP-MBNJB-22	22	22x1.5
81-TP-MBNJB-26	26	26x1.5
81-TP-MBNJB-30	30	30x1.5

NPTF MALE

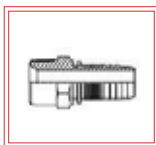


PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-NPM-0302	03	3/16"	02	1/8"-27	12	0	20.8	0.0
81-TP-NPM-0304	03	3/16"	04	1/4"-18	15	0	25.3	0.0
81-TP-NPM-0402	04	1/4"	02	1/8"-27	12	0	21.3	0.0
81-TP-NPM-0404	04	1/4"	04	1/4"-18	15	0	26.8	0.0
81-TP-NPM-0406	04	1/4"	06	3/8"-18	19	0	27.8	0.0
81-TP-NPM-0408	04	1/4"	08	1/2"-14	22	0	31.3	0.0
81-TP-NPM-0504	05	5/16"	04	1/4"-18	15	0	26.8	0.0

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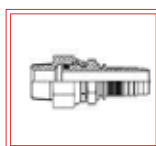
HYDRAULIC TWO PIECE

NPTF MALE



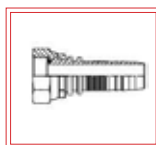
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-NPM-0506	05	5/16"	06	3/8"-18	19	0	27.8	0.0
81-TP-NPM-0604	06	3/8"	04	1/4"-18	15	0	26.8	0.0
81-TP-NPM-0606	06	3/8"	06	3/8"-18	19	0	27.8	0.0
81-TP-NPM-0608	06	3/8"	08	1/2"-14	22	0	31.3	0.0
81-TP-NPM-0806	08	1/2"	06	3/8"-18	19	0	28.6	0.0
81-TP-NPM-0808	08	1/2"	08	1/2"-14	22	0	32.1	0.0
81-TP-NPM-0812	08	1/2"	12	3/4"-14	27	0	34.1	0.0
81-TP-NPM-1008	10	5/8"	08	1/2"-14	22	0	33.1	0.0
81-TP-NPM-1012	10	5/8"	12	3/4"-14	27	0	34.1	0.0
81-TP-NPM-1208	12	3/4"	08	1/2"-14	22	0	33.6	0.0
81-TP-NPM-1212	12	3/4"	12	3/4"-14	27	0	34.6	0.0
81-TP-NPM-1216	12	3/4"	16	1"-11 1/2	36	0	43.6	0.0
81-TP-NPM-1612	16	1"	12	3/4"-14	27	0	39.4	0.0
81-TP-NPM-1616	16	1"	16	1"-11 1/2	36	0	44.4	0.0
81-TP-NPM-1620	16	1"	20	1-1/4"-11 1/2	46	0	47.4	0.0
81-TP-NPM-2020	20	1-1/4"	20	1-1/4"-11 1/2	46	0	49.0	0.0
81-TP-NPM-2024	20	1-1/4"	24	1-1/2"-11 1/2	50	0	50.5	0.0
81-TP-NPM-2424	24	1-1/2"	24	1-1/2"-11 1/2	50	0	50.5	0.0
81-TP-NPM-2432	24	1-1/2"	32	2"-11 1/2	65	0	54.2	0.0
81-TP-NPM-3232	32	2"	32	2"-11 1/2	65	0	54.2	0.0
81-TP-NPM-4848	48	3"	48	3" - 8	65	0	54.2	0.0

NPTF MALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-NPMX-0404	04	1/4"	04	1/4"-18	15	0	24.3	0.0
81-TP-NPMX-0406	04	1/4"	06	3/8"-18	19	0	24.8	0.0
81-TP-NPMX-0604	06	3/8"	04	1/4"-18	15	0	24.3	0.0
81-TP-NPMX-0606	06	3/8"	06	3/8"-18	19	0	24.8	0.0
81-TP-NPMX-0608	06	3/8"	08	1/2"-14	22	0	26.6	0.0
81-TP-NPMX-0806	08	1/2"	06	3/8"-18	19	0	24.8	0.0
81-TP-NPMX-0808	08	1/2"	08	1/2"-14	22	0	26.6	0.0
81-TP-NPMX-1212	12	3/4"	12	3/4"-14	27	0	28.6	0.0
81-TP-NPMX-1616	16	1"	16	1"-11 1/2	36	0	35.4	0.0

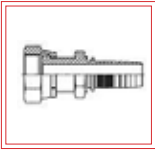
NPSM FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-NSFX-0404	04	1/4"	04	1/4"-18	19	0	23.7	0.0
81-TP-NSFX-0606	06	3/8"	06	3/8"-18	22	0	27.8	0.0
81-TP-NSFX-0808	08	1/2"	08	1/2"-14	27	0	31.0	0.0
81-TP-NSFX-1212	12	3/4"	12	3/4"-14	32	0	29.7	0.0
81-TP-NSFX-1616	16	1"	16	1"-11 1/2	38	0	34.4	0.0

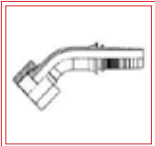
HYDRAULIC TWO PIECE

ORFS FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFFX-0304	03	3/16"	04	9/16"-18	17	14	26.8	0.0
81-TP-OFFX-0404	04	1/4"	04	9/16"-18	17	14	27.3	0.0
81-TP-OFFX-0406	04	1/4"	06	11/16"-16	22	17	30.3	0.0
81-TP-OFFX-0408	04	1/4"	08	13/16"-16	24	22	35.3	0.0
81-TP-OFFX-0506	05	5/16"	06	11/16"-16	22	17	30.3	0.0
81-TP-OFFX-0606	06	3/8"	06	11/16"-16	22	17	30.3	0.0
81-TP-OFFX-0608	06	3/8"	08	13/16"-16	24	22	35.3	0.0
81-TP-OFFX-0806	08	1/2"	06	11/16"-16	22	17	32.1	0.0
81-TP-OFFX-0808	08	1/2"	08	13/16"-16	24	22	36.1	0.0
81-TP-OFFX-0810	08	1/2"	10	1"-14	30	24	39.6	0.0
81-TP-OFFX-0812	08	1/2"	12	1-3/16"-12	36	30	42.1	0.0
81-TP-OFFX-1008	10	5/8"	08	13/16"-16	24	22	37.1	0.0
81-TP-OFFX-1010	10	5/8"	10	1"-14	30	24	39.6	0.0
81-TP-OFFX-1012	10	5/8"	12	1-3/16"-12	36	30	42.1	0.0
81-TP-OFFX-1210	12	3/4"	10	1"-14	30	24	40.1	0.0
81-TP-OFFX-1212	12	3/4"	12	1-3/16"-12	36	30	42.6	0.0
81-TP-OFFX-1216	12	3/4"	16	1-7/16"-12	41	36	48.6	0.0
81-TP-OFFX-1612	16	1"	12	1-3/16"-12	36	30	45.4	0.0
81-TP-OFFX-1616	16	1"	16	1-7/16"-12	41	36	49.4	0.0
81-TP-OFFX-1620	16	1"	20	1-11/16"-12	50	41	50.4	0.0
81-TP-OFFX-2020	20	1-1/4"	20	1-11/16"-12	50	41	52.0	0.0
81-TP-OFFX-2424	24	1-1/2"	24	2"-12	60	50	56.5	0.0

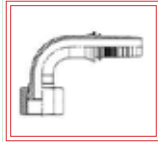
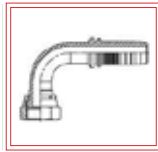
ORFS FEMALE 45DEG SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFFX45-0404	04	1/4"	04	9/16"-18	17	0	41.1	11.0
81-TP-OFFX45-0406	04	1/4"	06	11/16"-16	22	0	46.1	11.0
81-TP-OFFX45-0506	05	5/16"	06	11/16"-16	22	0	46.3	12.0
81-TP-OFFX45-0606	06	3/8"	06	11/16"-16	22	0	47.4	12.0
81-TP-OFFX45-0608	06	3/8"	08	13/16"-16	24	0	51.2	15.0
81-TP-OFFX45-0808	08	1/2"	08	13/16"-16	24	0	47.1	16.0
81-TP-OFFX45-0810	08	1/2"	10	1"-14	30	0	50.4	16.5
81-TP-OFFX45-1010	10	5/8"	10	1"-14	30	0	57.7	17.0
81-TP-OFFX45-1012	10	5/8"	12	1-3/16"-12	36	0	63.1	21.0
81-TP-OFFX45-1212	12	3/4"	12	1-3/16"-12	36	0	63.5	21.0
81-TP-OFFX45-1216	12	3/4"	16	1-7/16"-12	41	0	70.7	24.0
81-TP-OFFX45-1616	16	1"	16	1-7/16"-12	41	0	82.4	26.0
81-TP-OFFX45-1620	16	1"	20	1-11/16"-12	50	0	85.4	26.0
81-TP-OFFX45-2020	20	1-1/4"	20	1-11/16"-12	50	0	97.4	26.0
81-TP-OFFX45-2024	20	1-1/4"	24	2"-12	60	0	101.1	28.0
81-TP-OFFX45-2424	24	1-1/2"	24	2"-12	60	0	104.4	28.0

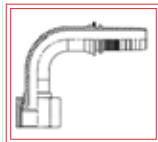
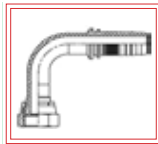
HYDRAULIC TWO PIECE

ORFS FEMALE 90DEG SWIVEL



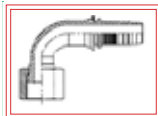
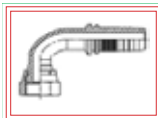
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFFX90-0404	04	1/4"	04	9/16"-18	17	0	29.8	32.0
81-TP-OFFX90-0406	04	1/4"	06	11/16"-16	22	0	37.3	38.0
81-TP-OFFX90-0506	05	5/16"	06	11/16"-16	22	0	40.7	34.0
81-TP-OFFX90-0606	06	3/8"	06	11/16"-16	22	0	41.8	38.0
81-TP-OFFX90-0608	06	3/8"	08	13/16"-16	24	0	43.8	41.0
81-TP-OFFX90-0808	08	1/2"	08	13/16"-16	24	0	34.8	42.0
81-TP-OFFX90-0810	08	1/2"	10	1"-14	30	0	48.3	47.0
81-TP-OFFX90-1010	10	5/8"	10	1"-14	30	0	55.4	44.0
81-TP-OFFX90-1012	10	5/8"	12	1-3/16"-12	36	0	55.4	58.0
81-TP-OFFX90-1212	12	3/4"	12	1-3/16"-12	36	0	61.6	58.0
81-TP-OFFX90-1216	12	3/4"	16	1-7/16"-12	41	0	65.6	71.0
81-TP-OFFX90-1616	16	1"	16	1-7/16"-12	41	0	82.6	66.0
81-TP-OFFX90-1620	16	1"	20	1-11/16"-12	50	0	82.6	78.0
81-TP-OFFX90-2020	20	1-1/4"	20	1-11/16"-12	50	0	97.0	78.0
81-TP-OFFX90-2024	20	1-1/4"	24	2"-12	60	0	102.0	84.0
81-TP-OFFX90-2424	24	1-1/2"	24	2"-12	60	0	107.8	87.0

ORFS FEMALE 90DEG SWIVEL LONG DROP



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFFX90L-0404	04	1/4"	04	9/16"-18	17	0	32.8	46.0
81-TP-OFFX90L-0406	04	1/4"	06	11/16"-16	22	0	34.8	54.0
81-TP-OFFX90L-0506	05	5/16"	06	11/16"-16	22	0	38.2	54.0
81-TP-OFFX90L-0606	06	3/8"	06	11/16"-16	22	0	41.8	54.0
81-TP-OFFX90L-0608	06	3/8"	08	13/16"-16	24	0	46.8	64.0
81-TP-OFFX90L-0808	08	1/2"	08	13/16"-16	24	0	38.3	64.0
81-TP-OFFX90L-0810	08	1/2"	10	1"-14	30	0	46.3	70.0
81-TP-OFFX90L-1010	10	5/8"	10	1"-14	30	0	55.4	70.0
81-TP-OFFX90L-1212	12	3/4"	12	1-3/16"-12	36	0	61.6	96.0
81-TP-OFFX90L-1616	16	1"	16	1-7/16"-12	41	0	82.6	114.0
81-TP-OFFX90L-1620	16	1"	20	1-11/16"-12	50	0	86.7	129.0
81-TP-OFFX90L-2020	20	1-1/4"	20	1-11/16"-12	50	0	97.0	129.0
81-TP-OFFX90L-2024	20	1-1/4"	24	2"-12	60	0	102.0	141.0
81-TP-OFFX90L-2424	24	1-1/2"	24	2"-12	60	0	110.8	141.0

ORFS FEMALE 90DEG SWIVEL SHORT DROP

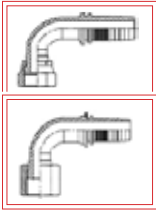


PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFFX90S-0404	04	1/4"	04	9/16"-18	17	0	28.5	21.0
81-TP-OFFX90S-0406	04	1/4"	06	11/16"-16	22	0	32.0	23.0
81-TP-OFFX90S-0506	05	5/16"	06	11/16"-16	22	0	49.3	26.0
81-TP-OFFX90S-0606	06	3/8"	06	11/16"-16	22	0	41.8	25.0
81-TP-OFFX90S-0608	06	3/8"	08	13/16"-16	24	0	41.8	29.0
81-TP-OFFX90S-0808	08	1/2"	08	13/16"-16	24	0	39.8	29.0
81-TP-OFFX90S-0810	08	1/2"	10	1"-14	30	0	46.3	32.5
81-TP-OFFX90S-1010	10	5/8"	10	1"-14	30	0	52.5	32.5
81-TP-OFFX90S-1012	10	5/8"	12	1-3/16"-12	36	0	55.4	49.0
81-TP-OFFX90S-1210	12	3/4"	10	1"-14	30	0	57.5	32.5
81-TP-OFFX90S-1212	12	3/4"	12	1-3/16"-12	36	0	60.6	51.0
81-TP-OFFX90S-1216	12	3/4"	16	1-7/16"-12	41	0	61.6	56.0
81-TP-OFFX90S-1612	16	1"	12	1-3/16"-12	36	0	54.6	51.0

Continued on next page

HYDRAULIC TWO PIECE

ORFS FEMALE 90DEG SWIVEL SHORT DROP



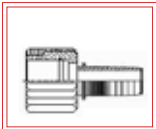
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFFX90S-1616	16	1"	16	1-7/16"-12	41	0	80.0	58.0
81-TP-OFFX90S-1620	16	1"	20	1-11/16"-12	50	0	82.6	64.0
81-TP-OFFX90S-2020	20	1-1/4"	20	1-11/16"-12	50	0	95.0	68.0
81-TP-OFFX90S-2024	20	1-1/4"	24	2"-12	60	0	102.0	69.0
81-TP-OFFX90S-2424	24	1-1/2"	24	2"-12	60	0	103.7	78.0

ORFS MALE



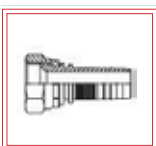
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-OFM-0404	04	1/4"	04	9/16"-18	17	0	22.3	0.0
81-TP-OFM-0406	04	1/4"	06	11/16"-16	19	0	24.3	0.0
81-TP-OFM-0606	06	3/8"	06	11/16"-16	19	0	24.3	0.0
81-TP-OFM-0608	06	3/8"	08	13/16"-16	22	0	26.8	0.0
81-TP-OFM-0610	06	3/8"	10	1"-14	27	0	29.8	0.0
81-TP-OFM-0808	08	1/2"	08	13/16"-16	22	0	27.1	0.0
81-TP-OFM-0810	08	1/2"	10	1"-14	27	0	30.6	0.0
81-TP-OFM-0812	08	1/2"	12	1-3/16"-12	32	0	34.1	0.0
81-TP-OFM-1010	10	5/8"	10	1"-14	27	0	30.6	0.0
81-TP-OFM-1012	10	5/8"	12	1-3/16"-12	32	0	34.1	0.0
81-TP-OFM-1210	12	3/4"	10	1"-14	27	0	31.1	0.0
81-TP-OFM-1212	12	3/4"	12	1-3/16"-12	32	0	34.6	0.0
81-TP-OFM-1216	12	3/4"	16	1-7/16"-12	38	0	38.1	0.0
81-TP-OFM-1616	16	1"	16	1-7/16"-12	38	0	37.9	0.0
81-TP-OFM-1620	16	1"	20	1-11/16"-12	46	0	39.9	0.0
81-TP-OFM-2020	20	1-1/4"	20	1-11/16"-12	46	0	41.5	0.0

PRESSURE WASHER FEMALE



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-PWFX-0422	04	1/4"	22	22MM	0	0	0.0	0.0
81-TP-PWFX-0622	06	3/8"	22	22MM	0	0	0.0	0.0

SAE 45DEG J512 FLARE FEMALE SWIVEL



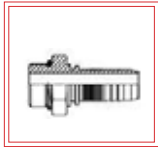
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-SFFX-0404	04	1/4"	04	7/16"-18	17	0	22.8	0.0
81-TP-SFFX-0606	06	3/8"	06	5/8"-18	22	0	23.3	0.0
81-TP-SFFX-0808	08	1/2"	08	3/4"-16	25	0	24.8	0.0
81-TP-SFFX-1010	10	5/8"	10	7/8"-14	27	0	26.6	0.0
81-TP-SFFX-1212	12	3/4"	12	1-1/16"-14	32	0	28.6	0.0

SAE 45DEG J512 FLARE 90DEG FEMALE SWIVEL



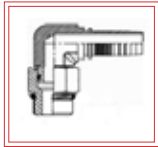
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-SFFX90-0606	06	3/8"	06	5/8"-18	22	0	31.7	32.0

UNO MALE



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-UNM-0608	06	3/8"	08	3/4"-16	22	0	0.0	0.0
81-TP-UNM-0808	08	1/2"	08	3/4"-16	22	0	0.0	0.0
81-TP-UNM-0810	08	1/2"	10	7/8"-14	27	0	0.0	0.0

UNO MALE SWIVEL 90DEG

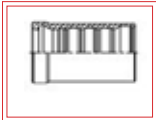


PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-UNMX90C-0808	08	1/2"	08	3/4"-16	27	19	23.5	52.4
81-TP-UNMX90C-0810	08	1/2"	10	7/8"-14	27	19	23.5	53.9

DG - DUAL-GRIP / INTERLOCK

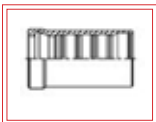
COUPLING TO SUIT : SAE 100 R13 - EN856 R13 / EXR13-24, R13-24 to EXR13-32, R13-32
 SAE 100 R15 / EXR15 -24, R15-24
 EN 856 4SH / EX4SH-24, S4SH-24 to EX4SH-32, S4SH-32
 5K Constant Pressure / EXUT5-24, XCP5S-24 to EXUT5-32, XCP5S-32
 6K Constant Pressure / EXUT6-24, XCP6S-24

FERRULE DUAL GRIP / INTERLOCK - 4SH-24 / 4SH-32



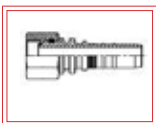
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-DGF1-24	24	1-1/2"
81-DGF1-32	32	2"

FERRULE DUAL GRIP / INTERLOCK - R13-24 / R13-32 / R15-24 / EXUT5-24 / XCP5S-24 / EXUT5-32 / XCP5S-32 / EXUT6-24 / XCP6S-24



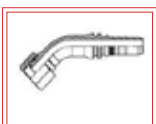
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-DGF2-20	20	1-1/4"
81-DGF2-24	24	1-1/2"
81-DGF2-32	32	2"

BSPP FEMALE SWIVEL DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-BPFX-2424	24	1-1/2"	24	1-1/2"-11	55	-	35.0	-
81-DG-BPFX-3232	32	2"	32	2"-11	70	-	33.0	-

BSPP FEMALE SWIVEL 45DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-BPFX45-2424	24	1-1/2"	24	1-1/2"-11	55	-	119.0	51.0
81-DG-BPFX45-3232	32	2"	32	2"-11	70	-	145.5	58.8

BSPP FEMALE SWIVEL 90DEG ELBOW DUAL GRIP - INTERLOCK



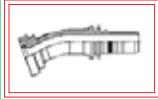
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-BPFX90-2424	24	1-1/2"	24	1-1/2"-11	55	-	106.6	110.8
81-DG-BPFX90-3232	32	2"	32	2"-11	70	-	133.6	130.0

CAT FLANGE DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF-2424	24	1-1/2"	24	1-1/2"	63.5	-	70.5	-

CAT FLANGE 22DEG ELBOW DUAL GRIP - INTERLOCK



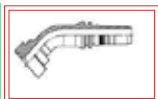
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF22-2424	24	1-1/2"	24	1-1/2"	63.5	-	132.5	21.9

CAT FLANGE 30DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF30-2424	24	1-1/2"	24	1-1/2"	63.5	-	129.0	30.8

CAT FLANGE 45DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF45-2424	24	1-1/2"	24	1-1/2"	63.5	-	118.4	50.4

CAT FLANGE 60DEG ELBOW DUAL GRIP - INTERLOCK



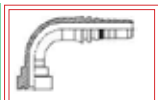
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF60-2424	24	1-1/2"	24	1-1/2"	63.5	-	154.3	71.1

CAT FLANGE 67DEG ELBOW DUAL GRIP - INTERLOCK



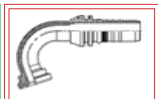
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF67-2424	24	1-1/2"	24	1-1/2"	63.5	-	144.4	81.4

CAT FLANGE 90DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF90-2424	24	1-1/2"	24	1-1/2"	63.5	-	106.6	110.0

CAT FLANGE 110DEG ELBOW DUAL GRIP - INTERLOCK



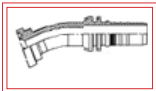
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-CF110-2424	24	1-1/2"	24	1-1/2"	63.5	-	86.2	125.2

CODE 62 FLANGE DUAL GRIP - INTERLOCK



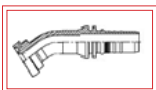
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH-2424	24	1-1/2"	24	1-1/2"	63.5	-	68.5	-
81-DG-FH-2432	24	1-1/2"	32	2"	79.4	-	80.5	-
81-DG-FH-3232	32	2"	32	2"	79.4	-	87.0	-

CODE 62 FLANGE 22DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH22-2424	24	1-1/2"	24	1-1/2"	63.5	-	110.5	19.1
81-DG-FH22-3232	32	2"	32	2"	79.4	-	166.9	27.3

CODE 62 FLANGE 30DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH30-2424	24	1-1/2"	24	1-1/2"	63.5	-	127.3	29.8
81-DG-FH30-3232	32	2"	32	2"	79.4	-	162.6	38.5

CODE 62 FLANGE 45DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH45-2424	24	1-1/2"	24	1-1/2"	63.5	-	117.0	49.0
81-DG-FH45-2432	24	1-1/2"	32	2"	79.4	-	122.6	54.7
81-DG-FH45-3232	32	2"	32	2"	79.4	-	149.4	62.7

CODE 62 FLANGE 60DEG ELBOW DUAL GRIP - INTERLOCK



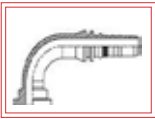
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH60-2424	24	1-1/2"	24	1-1/2"	63.5	-	153.3	69.4
81-DG-FH60-3232	32	2"	32	2"	79.4	-	192.5	88.1

CODE 62 FLANGE 67DEG ELBOW DUAL GRIP - INTERLOCK



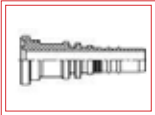
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH67-2424	24	1-1/2"	24	1-1/2"	63.5	-	143.6	79.5
81-DG-FH67-3232	32	2"	32	2"	79.4	-	180.2	100.7

CODE 62 FLANGE 90DEG ELBOW DUAL GRIP - INTERLOCK



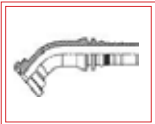
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FH90-2424	24	1-1/2"	24	1-1/2"	63.5	-	106.6	108.0
81-DG-FH90-2432	24	1-1/2"	32	2"	79.4	-	106.6	116.0
81-DG-FH90-3232	32	2"	32	2"	79.4	-	133.6	135.5

CODE 61 FLANGE DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FL-2424	24	1-1/2"	24	1-1/2"	60.3	-	56.0	-
81-DG-FL-2432	24	1-1/2"	32	2"	71.4	-	67.5	-
81-DG-FL-3232	32	2"	32	2"	71.4	-	69.0	-

CODE 61 FLANGE 45DEG ELBOW DUAL GRIP - INTERLOCK



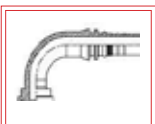
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FL45-2424	24	1-1/2"	24	1-1/2"	60.3	-	107.1	39.1
81-DG-FL45-3232	32	2"	32	2"	71.4	-	132.1	45.4

CODE 61 FLANGE 67DEG ELBOW DUAL GRIP - INTERLOCK



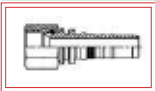
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FL67-2424	24	1-1/2"	24	1-1/2"	60.3	-	138.2	66.6
81-DG-FL67-3232	32	2"	32	2"	71.4	-	170.8	78.0

CODE 61 FLANGE 90DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-FL90-2424	24	1-1/2"	24	1-1/2"	60.3	-	106.6	94.0
81-DG-FL90-3232	32	2"	32	2"	71.4	-	133.6	111.0

JIC FEMALE SWIVEL DH DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-JCFX-2424	24	1-1/2"	24	1-7/8"-12	55	-	41.9	-
81-DG-JCFX-3232	32	2"	32	2-1/2"-12	70	-	49.0	-

JIC FEMALE SWIVEL DH 45DEG ELBOW DUAL GRIP - INTERLOCK



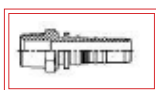
PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-JCFX45-2424	24	1-1/2"	24	1-7/8"-12	55	-	115.9	47.9
81-DG-JCFX45-3232	32	2"	32	2-1/2"-12	70	-	144.1	57.4

JIC FEMALE SWIVEL DH 90DEG ELBOW DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-JCFX90-2424	24	1-1/2"	24	1-7/8"-12	55	-	106.6	106.4
81-DG-JCFX90-3232	32	2"	32	2-1/2"-12	70	-	133.6	128.0

NPT MALE DUAL GRIP - INTERLOCK



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-NPM-2424	24	1-1/2"	24	1-1/2"-11 1/2	50	-	51.0	-
81-DG-NPM-3232	32	2"	32	2"-11 1/2	65	-	55.5	-

ORFS FEMALE SWIVEL DUAL GRIP - INTERLOCK

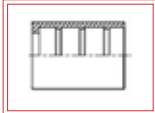


PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-DG-OFFX-2424	24	1-1/2"	24	2"-12	60	50	52.0	-

SJ - SEWER JETTING TWO PIECE

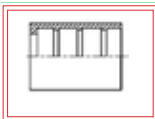
COUPLING TO SUIT EXITFLEX YELLOW SEWER CLEANING 5000PSI
 EXITFLEX GREEN SEWER CLEANING 4000PSI
 EXITFLEX BLUE SEWER CLEANING 3000PSI
 EXITFLEX ORANGE SEWER CLEANING 2500PSI

TWO PIECE FERRULE TO SUIT - YELLOW 5000PSI



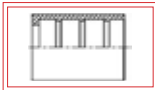
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJF1-03	03	3/16"
81-SJF1-04	04	1/4"
81-SJF1-06	06	3/8"

TWO PIECE FERRULE TO SUIT - BLUE 3000PSI / ORANGE



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJF1-12	12	3/4"
81-SJF1-16	16	1"
81-SJF1-20	20	1-1/4"

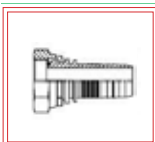
TWO PIECE FERRULE TO SUIT - GREEN 4000PSI



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJFG-08	08	1/2"

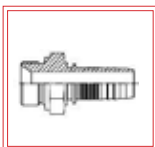
SJ - SEWER JETTING TWO PIECE HOSETAILS

BSPF FEMALE SWIVEL



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-BPFX-0404	04	1/4"
81-SJ-BPFX-0606	06	3/8"
81-SJ-BPFX-0808	08	1/2"
81-SJ-BPFX-1212	12	3/4"
81-SJ-BPFX-1616	16	1"
81-SJ-BPFX-2020	20	1-1/4"

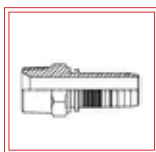
BSPF MALE



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-BPM-0202	02	1/8"
81-SJ-BPM-1212	12	3/4"
81-SJ-BPM-1616	16	1"
81-SJ-BPM-2020	20	1-1/4"

HYDRAULIC TWO PIECE

BSPT MALE



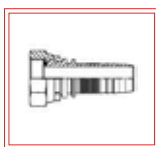
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-BTM-0304	03	3/16"
81-SJ-BTM-0404	04	1/4"
81-SJ-BTM-0606	06	3/8"
81-SJ-BTM-1616	16	1"
81-SJ-BTM-2020	20	1-1/4"

HOSE MENDER / JOINER



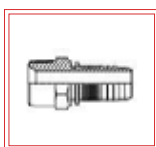
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-HM-0404	04	1/4"
81-SJ-HM-0606	06	3/8"
81-SJ-HM-0808	08	1/2"
81-SJ-HM-1212	12	3/4"
81-SJ-HM-1616	16	1"
81-SJ-HM-2020	20	1-1/4"

NPSM FEMALE SWIVEL



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-NPFX-0808	08	1/2"
81-SJ-NPFX-1212	12	3/4"
81-SJ-NPFX-1616	16	1"
81-SJ-NPFX-2020	20	1-1/4"

NPTF MALE



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-NPM-0808	08	1/2"
81-SJ-NPM-1212	12	3/4"
81-SJ-NPM-1616	16	1"
81-SJ-NPM-2020	20	1-1/4"

HOSE MENDER / JOINER - ORANGE



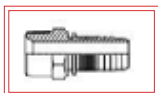
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-OHM-1616	16	1"

NPSM FEMALE SWIVEL - ORANGE



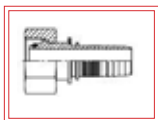
PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-ONPFX-1616	16	1"

NPTF MALE - ORANGE



PART NUMBER	HOSE	
	DASH SIZE	ID SIZE
81-SJ-ONPM-1616	16	1"

WATERBLAST METRIC DIN 24DEG HEAVY FEMALE SWIVEL



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TP-WB-DHFX-0824	08	1/2"	24	24x1.5	30	0	34.0	0.0
81-TP-WB-DHFX-1236	12	3/4"	36	36x2.0	41	0	0.0	0.0

TWO PIECE FERRULE TO SUIT - WATERBLAST



PART NUMBER	HOSE		THREAD		HEX 1	HEX 2	CUT OFF FACTOR	DROP
	DASH SIZE	ID SIZE	DASH SIZE	ID SIZE				
81-TPFWB-281-08	08	1/2"	0	0	0	0	0.0	0.0
81-TPFWB-281-12	12	3/4"	0	0	0	0	0.0	0.0



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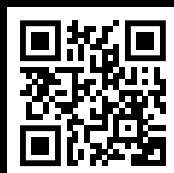
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