


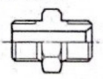
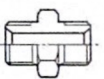
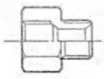

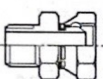
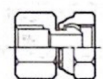
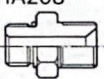
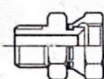

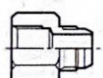
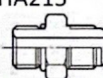
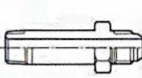
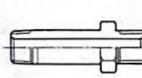
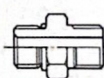


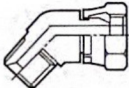






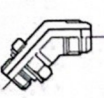
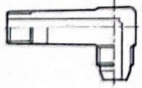
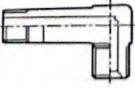




**H**ose

***adapter***

# INDEX

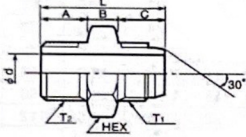
- ※ Fluid : Hydraulic
- ※ Material : Plated steel

- NNT : NHA-Smooth Flow Adapter  
NHL-Smooth Flow Elbow
- SH※ : SHA-Existing Adapter  
SHL-Existing Elbow

SHA201 NHA201  P1	SHA202 NHA202  P2	SHA203  P3	SHA204  P3 · P4	SHA205  P4	
SHA206  P5	SHA207  P6	SHA208 NHA208  P7	SHA209  P7	SHA213  P8	
SHA214  P8 · P9	SHA215 NHA215  P9	SHA216  P10	SHA217  P10	SHA230  P10	
SHL201 NHL201  P10 · P11	SHL202  P11	SHL203  P11	SHL204 SHL220 NHL204  P12	SHL205 NHL205  P12 · P13	
SHL210 NHL210  P13	SHL211 NHL211  P14	SHL212 NHL212  P15	SHL213 SHL219  P16	SHL214 SHL221  P17	
SHL216  P18	SHL217  P18	SMS1  P19	SMS2  P19	SMS3  P19	SMS4  P19

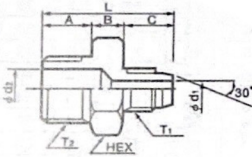
## NHA201 / SHA 201 (Same size)

NHA : Smooth Flow Hose Adaptor



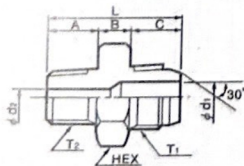
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	HEX
SHA201-01X01	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>8</sub>	10	6	13.0	4.0	29.0	14
NHA201-02X02	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	16.0	5.5	37.0	19
NHA201-03X03	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	17.5	7.0	40.5	22
NHA201-04X04	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	20.0	10.0	48.0	27
SHA201-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	20	12	21.5	16.0	53.5	※36
SHA201-08X08	G 1	R 1	22	12	22.5	21.5	56.5	41
SHA201-10X10	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	25	14	27.0	27.5	66.0	50
SHA201-12X12	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	25	14	27.0	33.0	66.0	60
SHA201-16X16	G 2	R 2	30	17	30.0	44.0	77.0	70
SHA201-20X20	G <sup>2</sup> / <sub>2</sub>	R <sup>2</sup> / <sub>2</sub>	33	17	43.0	56.0	93.0	80
SHA201-24X24	G 3	R 3	38	18	43.0	68.0	99.0	90
* SHA201-32X32	G 4	R 4	45	22	56.0	88.0	123.0	120

## SHA 201 ( Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA201-01X02	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	13.0	4.0	5.5	34.0	14
SHA201-02X03	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	16.0	5.5	7.0	39.0	19
SHA201-03X04	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	17.5	7.0	10.0	45.5	22
SHA201-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	20	10	20.0	10.0	16.0	50.0	27
SHA201-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	22	12	21.5	16.0	21.5	55.5	※36
* SHA201-08X10	G 1	R <sup>1</sup> / <sub>4</sub>	25	14	22.5	21.5	27.5	61.5	46
* SHA201-10X12	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	25	14	27.0	28.0	28.0	66.0	50
* SHA201-12X16	G <sup>1</sup> / <sub>2</sub>	R 2	30	14	27.0	33.0	33.0	71.0	60

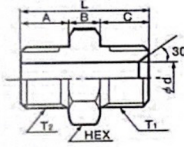
## SHA 201 (Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA201-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	10	8	16.0	5.5	4.0	34.0	19
SHA201-03X02	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	17.5	7.0	5.5	38.5	22
SHA201-04X03	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	15	10	20.0	10.0	7.0	45.0	27
SHA201-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	18	12	21.5	16.0	10.0	51.5	32
SHA201-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	20	12	22.5	21.5	16.0	54.5	38
* SHA201-10X08	G <sup>1</sup> / <sub>4</sub>	R 1	22	14	27.0	27.5	21.5	63.0	46
* SHA201-12X10	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>4</sub>	25	14	27.0	28.0	28.0	66.0	50
* SHA201-16X12	G 2	R <sup>1</sup> / <sub>2</sub>	25	14	30.0	33.0	33.0	69.0	60

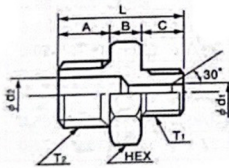
## NHA202 / SHA 202 (Same size)

NHA : Smooth Flow Hose Adaptor



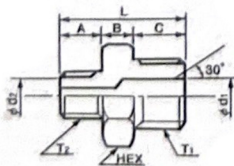
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	HEX
SHA202-01X01	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>8</sub>	10	6	11	4.0	27	14
NHA202-02X02	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	13	5.5	34	19
NHA202-03X03	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	15	7.0	38	22
NHA202-04X04	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	18	10.0	46	27
SHA202-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	20	12	20	16.0	52	※36
SHA202-08X08	G 1	R 1	22	12	22	21.5	56	41
SHA202-10X10	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	25	14	24	27.5	63	50
SHA202-12X12	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	25	14	24	33.0	63	60
SHA202-16X16	G 2	R 2	30	17	28	44.0	75	70
SHA202-20X20	G <sup>2</sup> / <sub>2</sub>	R <sup>2</sup> / <sub>2</sub>	33	17	33	56.0	83	80
SHA202-24X24	G 3	R 3	38	18	34	68.0	90	90
SHA202-32X32	G 4	R 4	45	22	45	88.0	112	120

## SHA 202 (Different size)



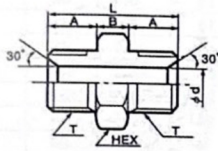
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA202-01X02	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	11	4.0	5.5	32	14
SHA202-02X03	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	13	5.5	7.0	36	19
SHA202-03X04	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	15	7.0	10.0	43	22
SHA202-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	20	10	18	10.0	16.0	48	27
SHA202-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	22	12	20	16.0	21.5	54	※36
* SHA202-08X10	G 1	R <sup>1</sup> / <sub>4</sub>	25	14	22	21.5	27.5	61	41
* SHA202-10X12	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	25	14	24	28.0	28.0	63	50
* SHA202-12X16	G <sup>1</sup> / <sub>2</sub>	R 2	30	14	24	33.0	33.0	68	60

## SHA 202 (Different size)



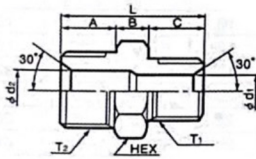
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA202-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	10	8	13	5.5	4.0	31	19
SHA202-03X02	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	15	7.0	5.5	36	22
SHA202-04X03	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	15	10	18	10.0	7.0	43	27
SHA202-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	18	12	20	16.0	10.0	50	32
SHA202-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	20	12	22	21.5	16.0	54	36
* SHA202-10X08	G <sup>1</sup> / <sub>4</sub>	R 1	22	14	24	27.5	21.5	60	46
* SHA202-12X10	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>4</sub>	25	14	24	28.0	28.0	63	50
* SHA202-16X12	G 2	R <sup>1</sup> / <sub>2</sub>	25	14	28	33.0	33.0	67	60

## SHA 203 (Same size)



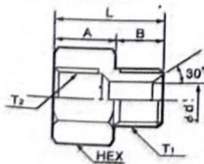
PART NUMBER	T	A	B	$\phi d$	L	HEX
* SHA203-01	G $\frac{1}{8}$	11	6	4.0	28	14
SHA203-02	G $\frac{1}{4}$	13	8	5.5	34	19
SHA203-03	G $\frac{3}{8}$	15	8	7.0	38	22
SHA203-04	G $\frac{1}{2}$	18	10	10.0	46	27
SHA203-06	G $\frac{3}{4}$	20	12	16.0	52	※36
SHA203-08	G 1	22	12	21.5	56	41
SHA203-10	G1 $\frac{1}{4}$	24	14	27.5	62	50
SHA203-12	G1 $\frac{1}{2}$	24	14	33.0	62	60
SHA203-16	G 2	28	17	44.0	73	70
* SHA203-20	G2 $\frac{1}{2}$	33	17	56.0	83	80
* SHA203-24	G 3	34	18	68.0	86	90

## SHA 203 (Different size)



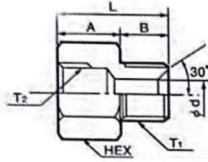
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	$\phi d_1$	$\phi d_2$	L	HEX
SHA203-01X02	G $\frac{1}{8}$	G $\frac{1}{4}$	13	8	11	4.0	5.5	32	14
SHA203-02X03	G $\frac{1}{4}$	G $\frac{3}{8}$	15	8	13	5.5	7.0	36	19
SHA203-03X04	G $\frac{3}{8}$	G $\frac{1}{2}$	18	10	15	7.0	10.0	43	22
SHA203-04X06	G $\frac{1}{2}$	G $\frac{3}{4}$	20	10	18	10.0	16.0	48	32
SHA203-06X08	G $\frac{3}{4}$	G 1	22	12	20	16.0	21.5	54	38
* SHA203-08X10	G 1	G1 $\frac{1}{4}$	24	14	22	21.5	27.5	60	46
* SHA203-10X12	G1 $\frac{1}{4}$	G1 $\frac{1}{2}$	24	14	24	28.0	28.0	62	50
* SHA203-12X16	G1 $\frac{1}{2}$	G 2	28	14	24	33.0	33.0	66	60

## SHA 204 (Same size)



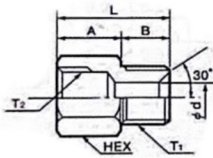
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	$\phi d$	L	HEX
* SHA204-01	G $\frac{1}{8}$	R $\frac{1}{8}$	15	11	3.0	26	14
SHA204-02	G $\frac{1}{4}$	R $\frac{1}{4}$	17	13	5.5	30	19
SHA204-03	G $\frac{3}{8}$	R $\frac{3}{8}$	19	15	7.0	34	22
SHA204-04	G $\frac{1}{2}$	R $\frac{1}{2}$	22	18	10.0	40	27
SHA204-06	G $\frac{3}{4}$	R $\frac{3}{4}$	25	20	16.0	45	※36
SHA204-08	G 1	R 1	27	22	21.5	49	41
SHA204-10	G1 $\frac{1}{4}$	R1 $\frac{1}{4}$	30	24	27.5	54	50
SHA204-12	G1 $\frac{1}{2}$	R1 $\frac{1}{2}$	30	24	33.0	54	60
SHA204-16	G 2	R 2	36	28	44.0	64	70
* SHA204-20	G2 $\frac{1}{2}$	R2 $\frac{1}{2}$	42	33	56.0	75	90

## SHA 204 (Different size)



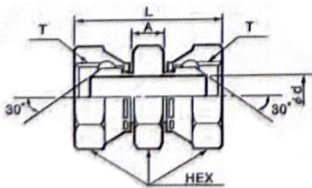
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	φ d	L	HEX
SHA204-01X02	G <sup>1</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>4</sub>	17	11	4.0	28	19
SHA204-02X03	G <sup>1</sup> / <sub>4</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	13	5.5	32	22
SHA204-03X04	G <sup>3</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	15	7.0	37	27
SHA204-04X06	G <sup>1</sup> / <sub>2</sub>	Rc <sup>3</sup> / <sub>4</sub>	25	18	10.0	43	36
SHA204-06X08	G <sup>3</sup> / <sub>4</sub>	Rc 1	27	20	16.0	47	41
* SHA204-08X10	G 1	Rc <sup>1</sup> / <sub>4</sub>	30	22	21.5	52	50
* SHA204-10X12	G <sup>1</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>2</sub>	30	24	27.5	54	60
* SHA204-12X16	G <sup>1</sup> / <sub>2</sub>	Rc 2	36	24	33.0	60	70

## SHA 204 (Different size)



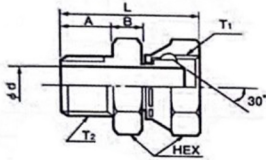
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	φ d	L	HEX
SHA204-02X01	G <sup>1</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>8</sub>	14	13	5.5	27	19
SHA204-03X02	G <sup>3</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>4</sub>	17	15	7.0	32	19
SHA204-04X03	G <sup>1</sup> / <sub>2</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	18	10.0	37	22
SHA204-06X04	G <sup>3</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	20	16.0	42	27
SHA204-08X06	G 1	Rc <sup>3</sup> / <sub>4</sub>	27	22	21.5	49	36
* SHA204-10X08	G <sup>1</sup> / <sub>4</sub>	Rc 1	27	24	27.5	51	41
* SHA204-12X10	G <sup>1</sup> / <sub>2</sub>	Rc <sup>1</sup> / <sub>4</sub>	30	24	33.0	54	50
* SHA204-16X12	G 2	Rc <sup>1</sup> / <sub>2</sub>	30	28	44.0	58	60

## SHA 205 (Same size)



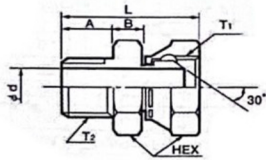
PART NUMBER	T <sub>1</sub>	A	φ d	L	HEX
SHA205-02	G <sup>1</sup> / <sub>4</sub>	8	5.5	42	19
SHA205-03	G <sup>3</sup> / <sub>8</sub>	8	7.0	46	22
SHA205-04	G <sup>1</sup> / <sub>2</sub>	10	10.0	53	27
SHA205-06	G <sup>3</sup> / <sub>4</sub>	12	16.0	60	※36
SHA205-08	G 1	12	21.5	65	41
SHA205-10	G <sup>1</sup> / <sub>4</sub>	14	27.5	74	50
SHA205-12	G <sup>1</sup> / <sub>2</sub>	14	33.0	74	60
SHA205-16	G 2	17	44.0	89	70

## SHA 206 (Same size)



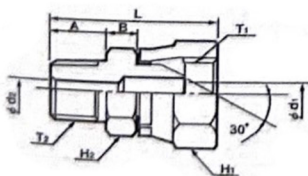
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	$\phi d$	L	HEX
SHA206-01X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>6</sub>	10	6	3.0	31	14
SHA206-02X02	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	5.5	38	19
SHA206-03X03	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	7.0	42	22
SHA206-04X04	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	10.0	50	27
SHA206-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	20	12	16.0	56	※36
SHA206-08X08	G 1	R 1	22	12	21.5	60	41
SHA206-10X10	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	25	14	27.5	69	50
SHA206-12X12	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	25	14	33.0	69	60
SHA206-16X16	G 2	R 2	30	17	44.0	83	70

## SHA 206 (Different size)



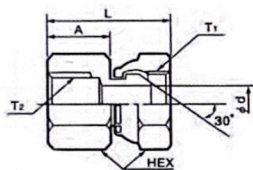
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	$\phi d_1$	$\phi d_2$	L	H1	H2
SHA206-02X03	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	5.5	7.0	40	19	19
SHA206-03X04	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	7.0	10.0	47	22	22
SHA206-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	20	12	10.0	16.0	54	27	27
SHA206-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	22	12	16.0	21.5	58	36	36
SHA206-08X10	G 1	R <sup>1</sup> / <sub>4</sub>	25	14	21.5	27.5	65	41	50
SHA206-10X12	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	25	14	27.5	33.0	68	50	60
SHA206-12X16	G <sup>1</sup> / <sub>2</sub>	R 2	30	14	33.0	44.0	73	60	70

## SHA 206 (Different size)



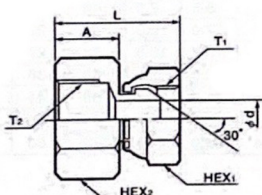
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	$\phi d_1$	$\phi d_2$	L	H1	H2
SHA206-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>6</sub>	10	8	5.5	4.0	35	19	19
SHA206-03X02	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	13	8	7.0	5.5	40	22	22
SHA206-04X03	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	15	8	10.0	7.0	45	27	27
SHA206-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	18	10	16.0	10.0	52	36	32
SHA206-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	20	12	21.5	16.0	58	41	38
* SHA206-10X08	G <sup>1</sup> / <sub>4</sub>	R 1	22	12	27.5	21.5	63	50	41
* SHA206-12X10	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>4</sub>	25	14	33.0	27.5	68	60	50
* SHA206-16X12	G 2	R <sup>1</sup> / <sub>2</sub>	25	17	44.0	33.0	77	70	60

## SHA 207 (Same size)



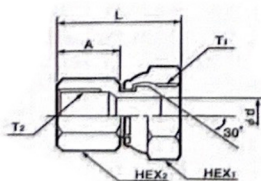
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	φ d	L	HEX
SHA207-02X02	G <sup>1</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>4</sub>	17	5.5	34	19
SHA207-03X03	G <sup>3</sup> / <sub>8</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	7.0	38	22
SHA207-04X04	G <sup>1</sup> / <sub>2</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	10.0	43	27
SHA207-06X06	G <sup>3</sup> / <sub>4</sub>	Rc <sup>3</sup> / <sub>4</sub>	25	16.0	49	※36
SHA207-08X08	G 1	Rc 1	27	21.5	53	41
SHA207-10X10	G1 <sup>1</sup> / <sub>4</sub>	Rc1 <sup>1</sup> / <sub>4</sub>	30	27.5	60	50
SHA207-12X12	G1 <sup>1</sup> / <sub>2</sub>	Rc1 <sup>1</sup> / <sub>2</sub>	30	33.0	60	60
SHA207-16X16	G 2	Rc 2	36	44.0	71	70

## SHA 207 (Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	φ d	L	HEX1	HEX2
SHA207-02X03	G <sup>1</sup> / <sub>4</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	5.5	36	19	22
SHA207-03X04	G <sup>3</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	7.0	41	22	27
SHA207-04X06	G <sup>1</sup> / <sub>2</sub>	Rc <sup>3</sup> / <sub>4</sub>	25	10.0	47	27	36
SHA207-06X08	G <sup>3</sup> / <sub>4</sub>	Rc 1	27	16.0	51	36	41
* SHA207-08X10	G 1	Rc1 <sup>1</sup> / <sub>4</sub>	30	21.5	57	41	50
* SHA207-10X12	G1 <sup>1</sup> / <sub>4</sub>	Rc1 <sup>1</sup> / <sub>2</sub>	30	27.5	60	50	60
* SHA207-12X16	G1 <sup>1</sup> / <sub>2</sub>	Rc 2	36	33.0	65	60	70

## SHA 207 (Different size)

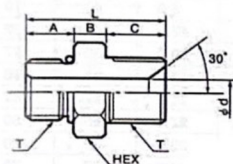


PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	φ d	L	HEX1	HEX2
* SHA207-02X01	G <sup>1</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>8</sub>	14	5.5	31	19	19
SHA207-03X02	G <sup>3</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>4</sub>	17	7.0	36	22	19
SHA207-04X03	G <sup>1</sup> / <sub>2</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	10.0	41	27	22
SHA207-06X04	G <sup>3</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	16.0	46	36	27
SHA207-08X06	G 1	Rc <sup>3</sup> / <sub>4</sub>	25	21.5	51	41	36
* SHA207-10X08	G1 <sup>1</sup> / <sub>4</sub>	Rc 1	27	27.5	57	50	41
* SHA207-12X10	G1 <sup>1</sup> / <sub>2</sub>	Rc1 <sup>1</sup> / <sub>4</sub>	30	33.0	60	60	50
* SHA207-16X12	G 2	Rc1 <sup>1</sup> / <sub>2</sub>	30	44.0	66	70	60



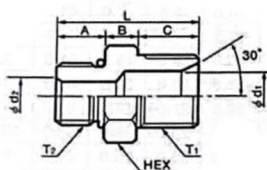
## NHA 208/SHA 208 (Same size) w/O-ring

NHA : Smooth Flow Hose Adaptor



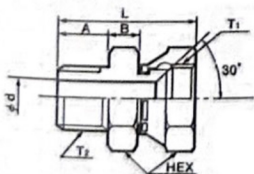
PART NUMBER	T	A	B	C	φ d	L	HEX
NHA208-02	G $\frac{1}{4}$	11	8	13	5.5	32	19
NHA208-03	G $\frac{3}{8}$	11	8	15	8.0	34	22
NHA208-04	G $\frac{1}{2}$	15	10	18	11.0	43	27
NHA208-06	G $\frac{3}{4}$	16	12	20	16.0	48	36
SHA208-08	G 1	18	12	22	21.5	52	41
* SHA208-10	G $\frac{1}{4}$	20	14	24	27.5	58	50
* SHA208-12	G $\frac{1}{2}$	22	14	24	33.0	60	60
* SHA208-16	G 2	25	17	28	44.0	70	70

## SHA 208 (Different size) w/O-ring



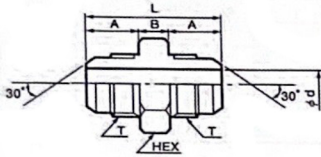
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA208-02X03	G $\frac{1}{4}$	G $\frac{3}{8}$	12	8	13	5.5	7.0	33	22
SHA208-03X04	G $\frac{3}{8}$	G $\frac{1}{2}$	15	10	15	7.0	10.0	40	27
SHA208-04X06	G $\frac{1}{2}$	G $\frac{3}{4}$	18	10	18	10.0	16.0	46	36
SHA208-06X08	G $\frac{3}{4}$	G 1	18	12	20	16.0	21.5	50	41
SHA208-03X02	G $\frac{3}{8}$	G $\frac{1}{4}$	12	8	15	7.0	5.5	35	19
SHA208-04X03	G $\frac{1}{2}$	G $\frac{3}{8}$	12	10	18	10.0	7.0	40	22
SHA208-06X04	G $\frac{3}{4}$	G $\frac{1}{2}$	15	12	20	16.0	10.0	47	27
SHA208-08X06	G 1	G $\frac{3}{4}$	18	12	22	21.5	16.0	52	36

## SHA 209 (Same size)



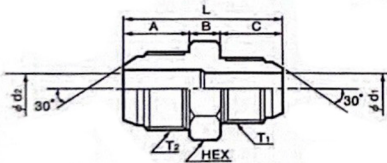
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	φ d	L	HEX
SHA209-02X02	G $\frac{1}{4}$	R $\frac{1}{4}$	13	8	5.5	38	19
SHA209-03X03	G $\frac{3}{8}$	R $\frac{3}{8}$	15	8	7.0	42	22
SHA209-04X04	G $\frac{1}{2}$	R $\frac{1}{2}$	18	10	10.0	50	27
SHA209-06X06	G $\frac{3}{4}$	R $\frac{3}{4}$	20	12	16.0	56	36
SHA209-08X08	G 1	R 1	22	12	21.5	60	41
SHA209-10X10	G $\frac{1}{4}$	R $\frac{1}{4}$	25	14	27.5	69	50
SHA209-12X12	G $\frac{1}{2}$	R $\frac{1}{2}$	25	14	33.0	69	60
SHA209-16X16	G 2	R 2	30	17	44.0	83	70

## SHA 213 (Same size)



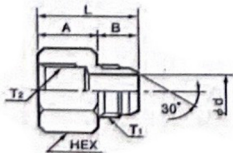
PART NUMBER	T	A	B	φ d	L	HEX
* SHA213-01	G $\frac{1}{8}$	13.0	6	4.0	32	14
SHA213-02	G $\frac{1}{4}$	16.0	8	5.5	40	19
SHA213-03	G $\frac{3}{8}$	17.5	8	7.0	43	22
SHA213-04	G $\frac{1}{2}$	20.0	10	10.0	50	27
SHA213-06	G $\frac{3}{4}$	21.5	12	16.0	55	※36
SHA213-08	G 1	22.5	12	21.5	57	41
SHA213-10	G $1\frac{1}{4}$	27.0	14	27.5	68	50
SHA213-12	G $1\frac{1}{2}$	27.0	14	33.0	68	60
SHA213-16	G 2	30.0	17	44.0	77	70
* SHA213-20	G $2\frac{1}{2}$	43.0	17	56.0	103	80
* SHA213-24	G 3	43.0	18	68.0	104	90

## SHA 213 (Different size)



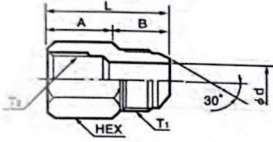
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA213-01X02	G $\frac{1}{8}$	G $\frac{1}{4}$	16.0	8	13.0	4.0	5.5	37.0	14
SHA213-02X03	G $\frac{1}{4}$	G $\frac{3}{8}$	17.5	8	16.0	5.5	7.0	41.5	19
SHA213-03X04	G $\frac{3}{8}$	G $\frac{1}{2}$	20.0	10	17.5	7.0	10.0	47.5	22
SHA213-04X06	G $\frac{1}{2}$	G $\frac{3}{4}$	21.5	10	20.0	10.0	16.0	51.5	32
SHA213-06X08	G $\frac{3}{4}$	G 1	22.5	12	21.5	16.0	21.5	56.0	38
* SHA213-08X10	G 1	G $1\frac{1}{4}$	27.0	14	22.5	21.5	27.5	63.5	46
* SHA213-10X12	G $1\frac{1}{4}$	G $1\frac{1}{2}$	27.0	14	27.0	28.0	28.0	68.0	50
* SHA213-12X16	G $1\frac{1}{2}$	G 2	30.0	14	27.0	33.0	33.0	71.0	60

## SHA 214 (Same size)



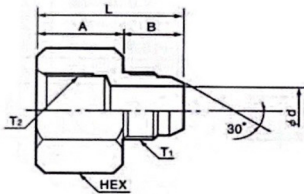
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	φ d	L	HEX
* SHA214-01X01	G $\frac{1}{8}$	Rc $\frac{1}{8}$	15	13.0	3.0	28.0	14
SHA214-02X02	G $\frac{1}{4}$	Rc $\frac{1}{4}$	17	16.0	5.5	33.0	19
SHA214-03X03	G $\frac{3}{8}$	Rc $\frac{3}{8}$	19	17.5	7.0	36.5	22
SHA214-04X04	G $\frac{1}{2}$	Rc $\frac{1}{2}$	22	20.0	10.0	42.0	27
SHA214-06X06	G $\frac{3}{4}$	Rc $\frac{3}{4}$	25	21.5	16.0	46.5	※36
SHA214-08X08	G 1	Rc 1	27	22.5	21.5	49.5	41
SHA214-10X10	G $1\frac{1}{4}$	Rc $1\frac{1}{4}$	30	27.0	27.5	57.0	50
SHA214-12X12	G $1\frac{1}{2}$	Rc $1\frac{1}{2}$	30	27.0	33.0	57.0	60
SHA214-16X16	G 2	Rc 2	36	30.0	44.0	66.0	70
* SHA214-20X20	G $2\frac{1}{2}$	Rc $2\frac{1}{2}$	42	43.0	56.0	85.0	90

## SHA 214 (Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	φ d	L	HEX
SHA214-01X02	G <sup>1</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>4</sub>	17	13.0	4.0	30.0	19
SHA214-02X03	G <sup>1</sup> / <sub>4</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	16.0	5.5	35.0	22
SHA214-03X04	G <sup>3</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	17.5	7.0	39.5	27
SHA214-04X06	G <sup>1</sup> / <sub>2</sub>	Rc <sup>3</sup> / <sub>4</sub>	25	20.0	10.0	45.0	36
SHA214-06X08	G <sup>3</sup> / <sub>4</sub>	Rc 1	27	21.5	16.0	48.5	41
SHA214-08X10	G 1	Rc1 <sup>1</sup> / <sub>4</sub>	30	22.5	21.5	52.5	50
SHA214-10X12	G1 <sup>1</sup> / <sub>4</sub>	Rc1 <sup>1</sup> / <sub>2</sub>	30	27.0	27.5	57.0	60
SHA214-12X16	G1 <sup>1</sup> / <sub>2</sub>	Rc 2	36	27.0	33.0	63.0	70

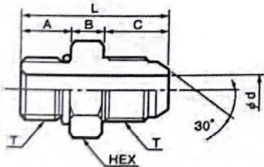
## SHA 214 (Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	φ d	L	HEX
SHA214-02X01	G <sup>1</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>8</sub>	14	16.0	5.5	30.0	19
SHA214-03X02	G <sup>3</sup> / <sub>8</sub>	Rc <sup>1</sup> / <sub>4</sub>	17	17.5	7.0	34.5	22
SHA214-04X03	G <sup>1</sup> / <sub>2</sub>	Rc <sup>3</sup> / <sub>8</sub>	19	20.0	10.0	39.0	27
SHA214-06X04	G <sup>3</sup> / <sub>4</sub>	Rc <sup>1</sup> / <sub>2</sub>	22	21.5	16.0	43.5	32
SHA214-08X06	G 1	Rc <sup>3</sup> / <sub>4</sub>	25	22.5	21.5	47.5	36
SHA214-10X08	G1 <sup>1</sup> / <sub>4</sub>	Rc 1	27	27.0	27.5	54.0	50
SHA214-12X10	G1 <sup>1</sup> / <sub>2</sub>	Rc1 <sup>1</sup> / <sub>4</sub>	30	27.0	33.0	57.0	50
SHA214-16X12	G 2	Rc1 <sup>1</sup> / <sub>2</sub>	30	30.0	44.0	60.0	60

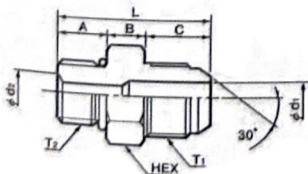
## NHA215 / SHA 215 (Same size) w/O-ring

NHA : Smooth Flow Hose Adaptor



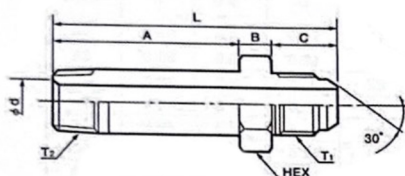
PART NUMBER	T	A	B	C	φ d	L	HEX
NHA215-02	G <sup>1</sup> / <sub>4</sub>	12	8	16.0	5.5	36.0	19
NHA215-03	G <sup>3</sup> / <sub>8</sub>	12	8	17.5	7.0	37.5	22
NHA215-04	G <sup>1</sup> / <sub>2</sub>	15	10	20.0	10.0	45.0	27
SHA215-06	G <sup>3</sup> / <sub>4</sub>	18	12	21.5	16.0	51.5	36
SHA215-08	G 1	18	12	22.5	21.5	52.5	41
SHA215-10	G1 <sup>1</sup> / <sub>4</sub>	20	14	27.0	27.5	61.0	50
SHA215-12	G1 <sup>1</sup> / <sub>2</sub>	22	14	27.0	33.0	63.0	60
SHA215-16	G 2	26	17	30.0	44.0	73.0	70

## SHA 215 (Different size) w/O-ring



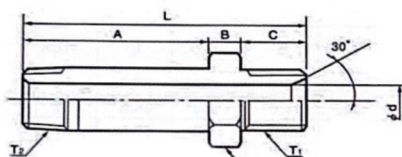
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d <sub>1</sub>	φ d <sub>2</sub>	L	HEX
SHA215-02X03	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	12	8	16.0	5.5	7.0	36.0	22
SHA215-03X04	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>	15	10	17.5	7.0	10.0	42.5	27
SHA215-04X06	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	18	10	20.0	10.0	16.0	48.0	36
SHA215-06X08	G <sup>3</sup> / <sub>4</sub>	G 1	18	12	21.5	16.0	21.5	51.5	41
SHA215-03X02	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	12	8	17.5	7.0	5.5	37.5	19
SHA215-04X03	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>8</sub>	12	10	20.0	10.0	7.0	42.0	22
SHA215-06X04	G <sup>3</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>2</sub>	15	12	21.5	16.0	10.0	48.5	27
SHA215-08X06	G 1	G <sup>3</sup> / <sub>4</sub>	18	12	22.5	21.5	16.0	52.5	36

## SHA 216 (Same size)



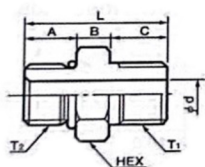
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	HEX
SHA216-02X02	G 1/4	R 1/4	50	8	16.0	5.5	74.0	19
SHA216-03X03	G 3/8	R 3/8	55	8	17.5	7.0	80.5	22
SHA216-04X04	G 1/2	R 1/2	65	10	20.0	10.0	95.0	27
SHA216-06X06	G 3/4	R 3/4	80	12	21.5	16.0	113.5	36
SHA216-08X08	G 1	R 1	85	12	22.5	21.5	119.5	41

## SHA 217 (Same size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	HEX
SHA217-02X02	G 1/4	R 1/4	50	8	13	5.5	71	19
SHA217-03X03	G 3/8	R 3/8	55	8	15	7.0	78	22
SHA217-04X04	G 1/2	R 1/2	65	10	18	10.0	93	27
SHA217-06X06	G 3/4	R 3/4	80	12	20	16.0	112	36
SHA217-08X08	G 1	R 1	85	12	22	21.5	119	41

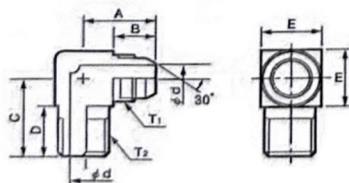
## SHA 230 (Same size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	HEX
SHA230-02X02	R 1/4	G 1/4	12	8	13	5.5	33	19
SHA230-03X03	R 3/8	G 3/8	12	8	15	7.0	35	22
SHA230-04X04	R 1/2	G 1/2	15	10	18	10.0	43	27
SHA230-06X06	R 3/4	G 3/4	18	12	20	16.0	50	36
SHA230-08X08	R 1	G 1	18	12	22	21.5	52	41
* SHA230-10X10	R 1 1/4	G 1 1/4	20	14	25	27.5	59	50
* SHA230-12X12	R 1 1/2	G 1 1/2	22	14	25	33.0	61	60
* SHA230-16X16	R 2	G 2	26	17	30	44.0	73	70

## NHL201 / SHL 201 (Same size)

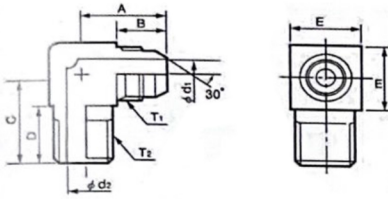
NHL : Smooth Flow Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d	E
SHL201-01X01	G 1/8	R 1/8	20.0	13.0	21.0	14.0	4.0	14
NHL201-02X02K	G 1/4	R 1/4	24.0	16.0	25.0	17.0	5.5	14
NHL201-03X03K	G 3/8	R 3/8	28.0	17.5	30.0	20.0	7.0	17
NHL201-04X04K	G 1/2	R 1/2	33.0	20.0	36.0	24.0	10.0	22
SHL201-06X06	G 3/4	R 3/4	36.5	21.5	43.0	28.0	16.0	30
SHL201-08X08	G 1	R 1	40.5	22.5	50.0	32.0	21.5	36
SHL201-10X10	G 1 1/4	R 1 1/4	49.5	27.0	57.5	35.0	27.5	45
SHL201-12X12	G 1 1/2	R 1 1/2	52.0	27.0	63.0	38.0	33.0	50
SHL201-16X16	G 2	R 2	61.5	30.0	73.5	42.0	44.0	63
* SHL201-20X20	G 2 1/2	R 2 1/2	83.0	43.0	88.0	48.0	56.0	80
* SHL201-24X24	G 3	R 3	90.5	43.0	101.5	54.0	68.0	95

## NHL 201/SHL 201 (Different size)

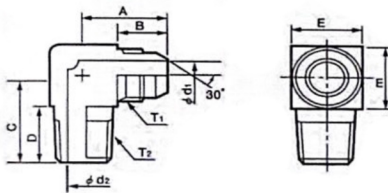
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL201-01X02	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	21.0	13.0	25.0	17	4.0	5.5	14
NHL201-02X03K	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	26.0	16.0	30.0	20	5.5	7.0	17
NHL201-03X04K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	30.5	17.5	36.0	24	7.0	10.0	22
SHL201-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	35.0	20.0	43.0	28	10.0	16.0	30
SHL201-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	39.5	21.5	50.0	32	16.0	21.5	36
* SHL201-08X10	G 1	R <sup>1</sup> / <sub>4</sub>	45.0	22.5	57.5	35	21.5	27.5	45
* SHL201-10X12	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	52.0	27.0	63.0	38	27.5	33.0	50
* SHL201-12X16	G <sup>1</sup> / <sub>2</sub>	R 2	58.5	27.0	73.5	42	33.0	44.0	63

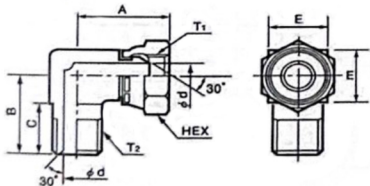
## NHL 201/SHL 201 (Different size)

NHL : Smooth Flow Hose Elbow



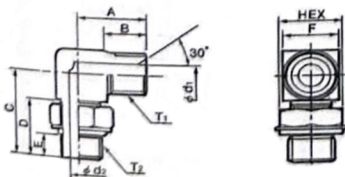
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL201-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	24.0	16.0	22.0	14	5.5	4.0	16
NHL201-03X02K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	28.0	17.5	27.0	17	7.0	5.5	17
NHL201-04X03K	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	33.0	20.0	32.0	20	10.0	7.0	22
SHL201-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	36.5	21.5	39.0	24	16.0	10.0	30
SHL201-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	40.5	22.5	46.0	28	21.5	16.0	36
* SHL201-10X08	G <sup>1</sup> / <sub>4</sub>	R 1	49.5	27.0	57.5	32	27.5	21.5	45
* SHL201-12X10	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>4</sub>	52.0	27.0	63.0	35	33.0	27.5	50
* SHL201-16X12	G 2	R <sup>1</sup> / <sub>2</sub>	61.5	30.0	73.5	38	44.0	33.0	63

## SHL 202 (Same size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	E	HEX
SHL202-02X02	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	27.0	25.0	17	5.5	16	19
SHL202-03X03	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	32.0	30.0	20	7.0	20	22
SHL202-04X04	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	36.0	36.0	24	10.0	24	27
SHL202-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	43.0	43.0	28	16.0	30	36
SHL202-08X08	G 1	R 1	49.0	50.0	32	21.5	36	41
* SHL202-10X10	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	60.5	57.5	35	27.5	45	50
* SHL202-12X12	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	62.0	63.0	38	33.0	50	60
* SHL202-16X16	G 2	R 2	75.5	73.5	42	44.0	63	70

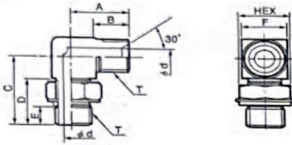
## SHL 203 (Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	E	F	φ d <sub>1</sub>	φ d <sub>2</sub>	HEX
NHL204-02x03K	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	25	13	35	24	9.0	19	5.5	7.0	22
NHL204-03x04K	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>	30	15	43	27	10.0	22	7.0	10.0	27
SHL204-04X06	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	34	18	49	30	11.0	30	10.0	16.0	32
SHL204-06X08	G <sup>3</sup> / <sub>4</sub>	G 1	41	20	52	33	12.0	36	16.0	21.5	41
NHL204-03x02K	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	25	15	35	21	7.5	19	7.0	5.5	19
NHL204-04x03K	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>8</sub>	30	18	43	24	9.0	22	10.0	7.0	22
SHL204-06X04	G <sup>3</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>2</sub>	34	20	49	27	10.0	30	16.0	10.0	27
SHL204-08X06	G 1	G <sup>3</sup> / <sub>4</sub>	41	22	52	30	11.0	36	21.5	16.0	32

## NHL 204 / SHL204 (Same size)

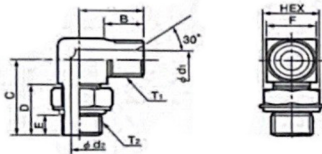
NHL : Smooth Flow Hose Elbow



PART NUMBER	T	A	B	C	D	E	F	φ d	HEX
NHL204-02x02K	G <sup>1</sup> / <sub>4</sub>	21	13	32	21	7.5	14	5.5	19
NHL204-03x03K	G <sup>3</sup> / <sub>8</sub>	25	15	35	24	9.0	19	7.0	22
NHL204-04x04K	G <sup>1</sup> / <sub>2</sub>	30	18	43	27	10.0	22	10.0	27
SHL204-06	G <sup>3</sup> / <sub>4</sub>	34	20	49	30	11.0	30	16.0	32
SHL204-08	G 1	41	22	52	33	12.0	36	21.5	41

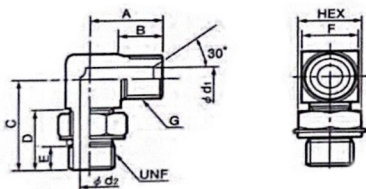
## NHL 204 / SHL 204 (Different size)

NHL : Smooth Flow Hose Elbow



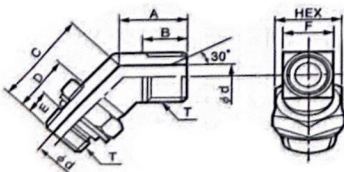
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	E	F	φ d <sub>1</sub>	φ d <sub>2</sub>	HEX
NHL204-02x03K	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	25	13	35	24	9.0	19	5.5	7.0	22
NHL204-03x04K	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>	30	15	43	27	10.0	22	7.0	10.0	27
SHL204-04X06	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	34	18	49	30	11.0	30	10.0	16.0	32
SHL204-06X08	G <sup>3</sup> / <sub>4</sub>	G 1	41	20	52	33	12.0	36	16.0	21.5	41
NHL204-03x02K	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	25	15	35	21	7.5	19	7.0	5.5	19
NHL204-04x03K	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>8</sub>	30	18	43	24	9.0	22	10.0	7.0	22
SHL204-06X04	G <sup>3</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>2</sub>	34	20	49	27	10.0	30	16.0	10.0	27
SHL204-08X06	G 1	G <sup>3</sup> / <sub>4</sub>	41	22	52	30	11.0	36	21.5	16.0	32

## SHL 220



PART NUMBER	G	UNF	A	B	C	D	E	F	φ d <sub>1</sub>	φ d <sub>2</sub>	HEX
SHL220-02X7/16	G <sup>1</sup> / <sub>4</sub>	7/16-20	21	13	32	18	7	14	5.5	4.4	14
SHL220-03X9/16	G <sup>1</sup> / <sub>4</sub>	9/16-18	21	13	32	20	8	14	5.5	7.0	19
SHL220-04X3/4	G <sup>3</sup> / <sub>8</sub>	3/4-16	25	15	37	23	9	19	7.0	10.0	24
SHL220-06X7/8	G <sup>1</sup> / <sub>2</sub>	7/8-14	30	18	43	26	10	22	10.0	12.3	27
SHL220-08X1-1/16	G <sup>3</sup> / <sub>4</sub>	1 1/16-12	34	20	49	30	12	30	16.0	15.5	32
SHL220-10X1-5/16	G 1	1 5/16-12	41	22	52	30	12	36	21.5	21.4	38

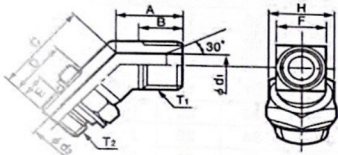
## SHL 205 (Same size)



PART NUMBER	T	A	B	C	D	E	F	φ d	HEX
SHL205-02	G <sup>1</sup> / <sub>4</sub>	19.0	13	29	21	7.5	14	5.5	19
SHL205-03	G <sup>3</sup> / <sub>8</sub>	22.5	15	33	24	9.0	19	7.0	22
SHL205-04	G <sup>1</sup> / <sub>2</sub>	26.0	18	39	27	10.0	22	10.0	27
SHL205-06	G <sup>3</sup> / <sub>4</sub>	30.0	20	44	30	11.0	30	16.0	32
SHL205-08	G 1	33.5	22	47	33	12.0	36	21.5	41

## NHL 205 / SHL 205 (Different size)

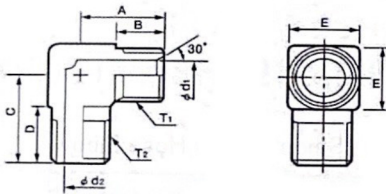
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	E	F	φ d <sub>1</sub>	φ d <sub>2</sub>	H
NHL205-02x03K	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	22.5	13	33	24	9.0	19	5.5	7.0	22
NHL205-03x04K	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>	26.0	15	39	27	10.0	22	7.0	10.0	27
SHL205-04X03	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	30.0	18	44	30	11.0	30	10.0	16.0	32
SHL205-06X08	G <sup>3</sup> / <sub>4</sub>	G 1	33.5	20	47	33	12.0	36	16.0	21.5	41
NHL205-03x02K	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	22.5	15	33	21	7.5	19	7.0	5.5	19
NHL205-04x03K	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>8</sub>	26.0	18	39	24	9.0	22	10.0	7.0	22
SHL205-06X04	G <sup>3</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>2</sub>	30.0	20	44	27	10.0	30	16.0	10.0	27
SHL205-08X06	G 1	G <sup>3</sup> / <sub>4</sub>	33.5	22	47	30	11.0	36	21.5	16.0	32

## NHL 210 / SHL 210 (Same size)

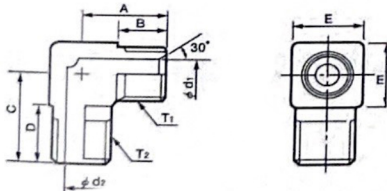
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d	E
SHL210-01X01	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>8</sub>	18.0	11	21.0	14	4.0	14
NHL210-02X02K	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	21.0	13	25.0	17	5.5	14
NHL210-03X03K	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	25.0	15	30.0	20	7.0	17
NHL210-04X04K	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	31.0	18	36.0	24	10.0	22
SHL210-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	35.0	20	43.0	28	16.0	30
SHL210-08X08	G 1	R 1	40.0	22	50.0	32	21.5	36
SHL210-10X10	G <sup>1</sup> / <sub>1</sub>	R <sup>1</sup> / <sub>1</sub>	47.5	25	57.5	35	27.5	45
SHL210-12X12	G <sup>1</sup> / <sub>1</sub>	R <sup>1</sup> / <sub>1</sub>	50.0	25	63.0	38	33.0	50
SHL210-16X16	G 2	R 2	61.5	30	73.5	42	44.0	63
* SHL210-20X20	G <sup>2</sup> / <sub>2</sub>	R <sup>2</sup> / <sub>2</sub>	73.0	33	88.0	48	56.0	80
* SHL210-24X24	G 3	R 3	82.5	35	101.5	54	68.0	95

## NHL 210 / SHL 210 (Different size)

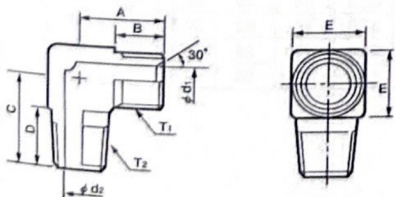
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL210-01X02	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	19.0	11	25.0	17	4.0	5.5	14
NHL210-02X03K	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	23.0	13	30.0	20	5.5	7.0	17
NHL210-03X04K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	27.0	15	36.0	24	7.0	10.0	22
SHL210-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	33.0	18	43.0	28	10.0	16.0	30
SHL210-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	38.0	20	50.0	32	16.0	21.5	36
* SHL210-08X10	G 1	R <sup>1</sup> / <sub>1</sub>	44.5	22	57.5	35	21.5	27.5	45
* SHL210-10X12	G <sup>1</sup> / <sub>1</sub>	R <sup>1</sup> / <sub>1</sub>	49.0	24	63.0	38	27.5	33.0	50
* SHL210-12X16	G <sup>1</sup> / <sub>1</sub>	R 2	55.5	24	73.5	42	33.0	44.0	63

## NHL 210 / SHL 210 (Different size)

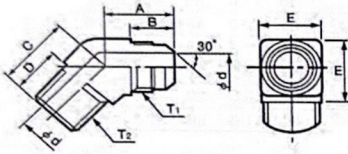
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL210-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	21.0	13	22.0	14	5.5	4.0	16
NHL210-03X02K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	25.0	15	27.0	17	7.0	5.5	17
NHL210-04X03K	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	31.0	18	32.0	20	10.0	7.0	22
SHL210-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	35.0	20	39.0	24	16.0	10.0	30
SHL210-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	40.0	22	46.0	28	21.5	16.0	36
* SHL210-10X08	G <sup>1</sup> / <sub>1</sub>	R 1	46.5	24	57.5	32	27.5	21.5	45
* SHL210-12X10	G <sup>1</sup> / <sub>1</sub>	R <sup>1</sup> / <sub>1</sub>	49.0	24	63.0	35	33.0	27.5	50
* SHL210-16X12	G 2	R <sup>1</sup> / <sub>1</sub>	59.5	28	73.5	38	44.0	33.0	63

## NHL 211 / SHL 211 (Same size)

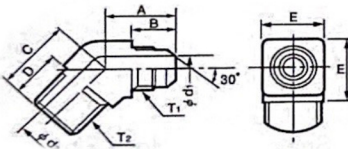
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d	E
* SHL211-01X01	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>8</sub>	19.0	13.0	18	12	4.0	14
NHL211-02X02K	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	22.0	16.0	19	13	5.5	14
NHL211-03X03K	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	25.0	17.5	22	15	7.0	17
NHL211-04X04K	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	30.0	20.0	27	18	10.0	22
SHL211-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	31.5	21.5	30	20	16.0	30
SHL211-08X08	G 1	R 1	34.0	22.5	34	22	21.5	36
SHL211-10X10	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	41.0	27.0	40	25	27.5	45
SHL211-12X12	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	43.0	27.0	41	25	33.0	50
SHL211-16X16	G 2	R 2	50.0	30.0	50	30	44.0	63
* SHL211-20X20	G <sup>2</sup> / <sub>2</sub>	R <sup>2</sup> / <sub>2</sub>	73.0	43.0	78	48	56.0	80
* SHL211-24X24	G 3	R 3	80.0	43.0	90	54	68.0	95

## NHL 211 / SHL 211 (Different size)

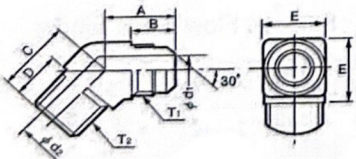
NHL : Smooth Flow Hose Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL211-01X02	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	19.0	13.0	19	13	4.0	5.5	14
NHL211-02X03K	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	23.0	16.0	22	15	5.5	7.0	17
NHL211-03X04K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	26.5	17.5	27	18	7.0	10.0	22
SHL211-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	30.0	20.0	30	20	10.0	16.0	30
SHL211-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	33.0	21.5	34	22	16.0	21.5	36
SHL211-08X10	G 1	R <sup>1</sup> / <sub>4</sub>	41.0	22.5	40	25	21.5	27.5	45
SHL211-10X12	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	43.0	27.0	41	25	27.5	33.0	50
SHL211-12X16	G <sup>1</sup> / <sub>2</sub>	R 2	50.0	27.0	50	30	33.0	44.0	63

## NHL 211 / SHL 211 (Different size)

NHL : Smooth Flow Hose Elbow

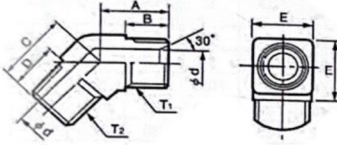


PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL211-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	22.0	16.0	18	12	5.5	4.0	16
NHL211-03X02K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	25.0	17.5	20	13	7.0	5.5	17
NHL211-04X03K	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	30.0	20.0	24	15	10.0	7.0	22
SHL211-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	31.5	21.5	28	18	16.0	10.0	30
SHL211-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	34.0	22.5	32	20	21.5	16.0	36
SHL211-10X08	G <sup>1</sup> / <sub>4</sub>	R 1	41.0	27.0	40	22	27.5	21.5	45
SHL211-12X10	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>4</sub>	43.0	27.0	41	25	33.0	27.5	50
SHL211-16X12	G 2	R <sup>1</sup> / <sub>2</sub>	50.0	30.0	50	25	44.0	33.0	63



## NHL 212 / SHL 212 (Same size)

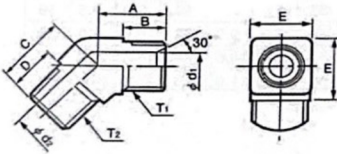
NHL : Smooth Flow Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d	E
* SHL212-01X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	17	11	18	12	4.0	14
NHL212-02X02K	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	19	13	19	13	5.5	14
NHL212-03X03K	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	22.5	15	22	15	7.0	17
NHL212-04X04K	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	28	18	27	18	10.0	22
SHL212-06X06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	30	20	30	20	16.0	30
SHL212-08X08	G 1	R 1	34	22	34	22	21.5	36
SHL212-10X10	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	41	25	40	25	27.5	45
SHL212-12X12	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	43	25	41	25	33.0	50
SHL212-16X16	G 2	R 2	50	30	50	30	44.0	63
* SHL212-20X20	G <sup>2</sup> / <sub>2</sub>	R <sup>2</sup> / <sub>2</sub>	63	33	78	48	56.8	80
* SHL212-24X24	G 3	R 3	72	35	90	54	68.0	95

## NHL 212 / SHL 212 (Different size)

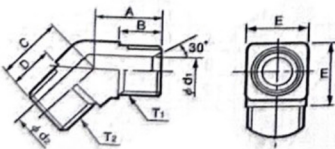
NHL : Smooth Flow Elbow



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL212-01X02	G <sup>1</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	17	11	19	13	4.0	5.5	14
NHL212-02X03K	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	20	13	22	15	5.5	7.0	17
NHL212-03X04K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	24	15	27	18	7.0	10.0	22
SHL212-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	28	18	30	20	10.0	16.0	30
SHL212-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	34	20	34	22	16.0	21.5	36
SHL212-08X10	G 1	R <sup>1</sup> / <sub>4</sub>	41	22	40	25	21.5	27.5	45
SHL212-10X12	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	43	24	41	25	27.5	33.0	50
SHL212-12X16	G <sup>1</sup> / <sub>2</sub>	R 2	49	24	50	30	33.0	44.0	63

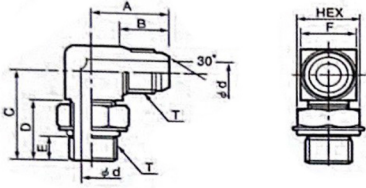
## NHL 212 / SHL 212 (Different size)

NHL : Smooth Flow Elbow



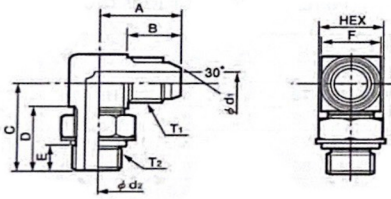
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL212-02X01	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>8</sub>	19	13	18	12	5.5	4.0	16
NHL212-03X02K	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	22.5	15	20	13	7.0	5.5	17
NHL212-04X03K	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	28	18	24	15	10.0	7.0	22
SHL212-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	30	20	28	18	16.0	10.0	30
SHL212-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	34	22	32	20	21.5	16.0	36
SHL212-10X08	G <sup>1</sup> / <sub>4</sub>	R 1	41	24	40	22	27.5	21.5	45
SHL212-12X10	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>4</sub>	43	24	41	25	33.0	27.5	50
SHL212-16X12	G 2	R <sup>1</sup> / <sub>2</sub>	50	30	50	25	44.0	33.0	63

## SHL 213 (Same size)



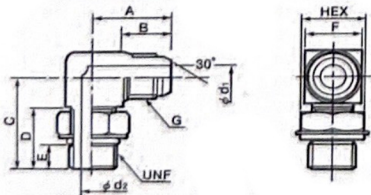
PART NUMBER	T	A	B	C	D	E	F	φ d	HEX
SHL213-02	G <sup>1</sup> / <sub>4</sub>	24.0	16.0	32	21	7.5	14	5.5	19
SHL213-03	G <sup>3</sup> / <sub>8</sub>	27.5	17.5	35	24	9.0	19	7.0	22
SHL213-04	G <sup>1</sup> / <sub>2</sub>	32.0	20.0	43	27	10.0	22	10.0	27
SHL213-06	G <sup>3</sup> / <sub>4</sub>	36.5	21.5	49	30	11.0	30	16.0	32
SHL213-08	G 1	40.5	22.5	52	33	12.0	36	21.5	41

## SHL 213 (Different size)



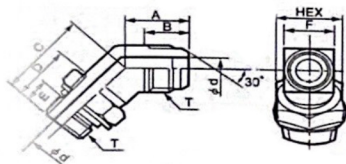
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	E	F	φ d <sub>1</sub>	φ d <sub>2</sub>	HEX
SHL213-02X03	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	27.5	16.0	35	24	9.0	19	5.5	7.0	22
SHL213-03X04	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>	32.0	17.5	43	27	10.0	22	7.0	10.0	27
SHL213-04X06	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	36.5	20.0	49	30	11.0	30	10.0	16.0	32
SHL213-06X08	G <sup>3</sup> / <sub>4</sub>	G 1	40.5	21.5	52	33	12.0	36	16.0	21.5	41
SHL213-03X02	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	27.5	17.5	35	21	7.5	19	7.0	5.5	19
SHL213-04X03	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>8</sub>	32.0	20.0	43	24	9.0	22	10.0	7.0	22
SHL213-06X04	G <sup>3</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>2</sub>	36.5	21.5	49	27	10.0	30	16.0	10.0	27
SHL213-08X06	G 1	G <sup>3</sup> / <sub>4</sub>	40.5	22.5	52	30	11.0	36	21.5	16.0	32

## SHL 219



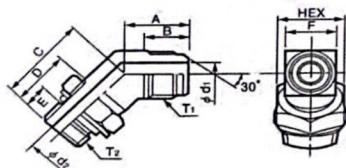
PART NUMBER	G	UNF	A	B	C	D	E	F	φ d <sub>1</sub>	φ d <sub>2</sub>	HEX
SHL219-02X7/16	G <sup>1</sup> / <sub>4</sub>	7/16-20	24.0	16.0	32	18	7	14	5.5	4.4	14
SHL219-03X9/16	G <sup>1</sup> / <sub>4</sub>	9/16-18	24.0	16.0	32	20	8	14	5.5	7.0	19
SHL219-04X3/4	G <sup>3</sup> / <sub>8</sub>	3/4-16	27.5	17.5	37	23	9	19	7.0	10.0	24
SHL219-06X7/8	G <sup>1</sup> / <sub>2</sub>	7/8-14	32.0	20.0	43	26	10	22	10.0	12.3	27
SHL219-08X1-1/16	G <sup>3</sup> / <sub>4</sub>	1 1/16-12	36.5	21.5	49	30	12	30	16.0	15.5	32
SHL219-10X1-5/16	G 1	1 5/16-12	40.5	22.5	52	30	12	36	21.5	21.4	38

## SHL 214 (Same size)



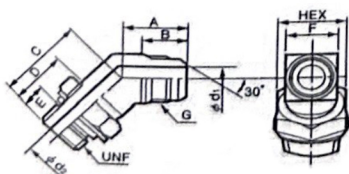
PART NUMBER	T	A	B	C	D	E	F	$\phi d$	HEX
SHL214-02	G $\frac{1}{4}$	22.0	16.0	29	21	7.5	14	5.5	19
SHL214-03	G $\frac{3}{8}$	24.5	17.5	33	24	9.0	19	7.0	22
SHL214-04	G $\frac{1}{2}$	28.0	20.0	39	27	10.0	22	10.0	27
SHL214-06	G $\frac{3}{4}$	31.5	21.5	44	30	11.0	30	16.0	32
SHL214-08	G 1	34.0	22.5	47	33	12.0	36	21.5	41

## SHL 214 (Different size)



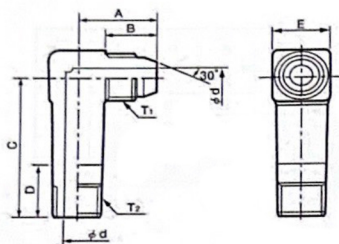
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	E	F	$\phi d_1$	$\phi d_2$	HEX
SHL214-02X03	G $\frac{1}{4}$	G $\frac{3}{8}$	24.5	16.0	33	24	9.0	19	5.5	7.0	22
SHL214-03X04	G $\frac{3}{8}$	G $\frac{1}{2}$	28.0	17.5	39	27	10.0	22	7.0	10.0	27
SHL214-04X06	G $\frac{1}{2}$	G $\frac{3}{4}$	31.5	20.0	44	30	11.0	30	10.0	16.0	32
SHL214-06X08	G $\frac{3}{4}$	G 1	34.0	21.5	47	33	12.0	36	16.0	21.5	41
SHL214-03X02	G $\frac{3}{8}$	G $\frac{1}{4}$	24.5	17.5	33	21	7.5	19	7.0	5.5	19
SHL214-04X03	G $\frac{1}{2}$	G $\frac{3}{8}$	28.0	20.0	39	24	9.0	22	10.0	7.0	22
SHL214-06X04	G $\frac{3}{4}$	G $\frac{1}{2}$	31.5	21.5	44	27	10.0	30	16.0	10.0	27
SHL214-08X06	G 1	G $\frac{3}{4}$	34.0	22.5	47	30	11.0	36	21.5	16.0	32

## SHL 221



PART NUMBER	G	UNF	A	B	C	D	E	F	$\phi d_1$	$\phi d_2$	HEX
SHL 221-02X7/16	G $\frac{1}{4}$	$\frac{1}{16}$ -20	22.0	16.0	29	21	7	14	5.5	4.4	14
SHL 221-03X9/16	G $\frac{1}{4}$	$\frac{3}{16}$ -18	22.0	16.0	29	21	8	14	5.5	7.0	19
SHL 221-04X3/4	G $\frac{3}{8}$	$\frac{3}{4}$ -18	24.5	17.5	33	24	9	19	7.0	10.0	24
SHL 221-06X7/8	G $\frac{1}{2}$	$\frac{7}{8}$ -14	28.0	20.0	39	27	10	22	10.0	12.3	27
SHL 221-08X1-1/16	G $\frac{3}{4}$	$1\frac{1}{16}$ -12	31.5	21.5	44	30	12	30	16.0	15.5	32
SHL 221-10X1-5/16	G 1	$1\frac{5}{16}$ -12	34.0	22.5	47	33	12	36	21.5	21.4	38

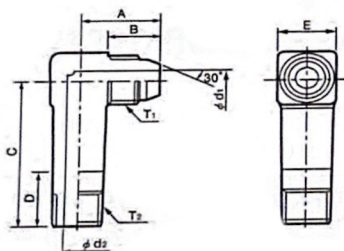
## SHL 216 (Same size)



SSのみ

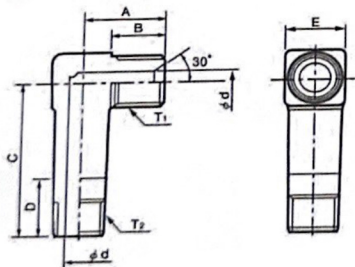
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	E
SHL216-02	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	24.0	16.0	57	5.5	17	16
SHL216-03	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	27.5	17.5	62	7.0	20	19
SHL216-04	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	32.0	20.0	64	10.0	24	24
SHL216-06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	36.5	21.5	85	16.0	28	30
SHL216-08	G 1	R 1	40.5	22.5	101	21.5	32	36

## SHL 216 (Different size)



PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL216-02X03	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	27.5	16.0	62	20	5.5	7.0	19
SHL216-03X04	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	32.0	17.5	64	24	7.0	10.0	24
SHL216-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	36.5	20.0	85	28	10.0	16.0	30
SHL216-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	40.5	21.5	101	32	16.0	21.5	36
SHL216-03X02	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	27.5	17.5	62	17	7.0	5.5	19
SHL216-04X03	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	32.0	20.0	64	20	10.0	7.0	24
SHL216-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	36.5	21.5	85	24	16.0	10.0	30
SHL216-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	40.5	22.5	101	28	21.5	16.0	36

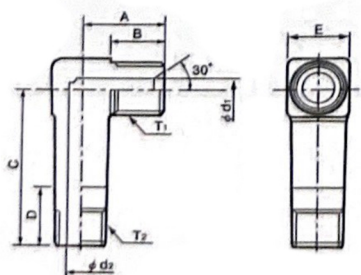
## SHL 217 (Same size)



SSのみ

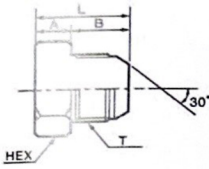
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	φ d	L	E
SHL217-02	G <sup>1</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>4</sub>	21	13	57	5.5	17	16
SHL217-03	G <sup>3</sup> / <sub>8</sub>	R <sup>3</sup> / <sub>8</sub>	25	15	62	7.0	20	19
SHL217-04	G <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	30	18	64	10.0	24	24
SHL217-06	G <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	35	20	85	16.0	28	30
SHL217-08	G 1	R 1	40	22	101	21.5	32	36

## SHL 217 (Different size)



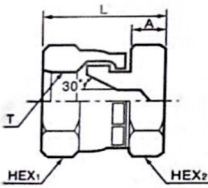
PART NUMBER	T <sub>1</sub>	T <sub>2</sub>	A	B	C	D	φ d <sub>1</sub>	φ d <sub>2</sub>	E
SHL217-02X03	G <sup>1</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>8</sub>	24	13	62	20	5.5	7.0	19
SHL217-03X04	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>2</sub>	29	14	64	24	7.0	10.0	24
SHL217-04X06	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	35	18	85	28	10.0	16.0	30
SHL217-06X08	G <sup>3</sup> / <sub>4</sub>	R 1	40	20	101	32	16.0	21.5	36
SHL217-03X02	G <sup>3</sup> / <sub>8</sub>	R <sup>1</sup> / <sub>4</sub>	24	14	62	17	7.0	5.5	19
SHL217-04X03	G <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	29	17	64	20	10.0	7.0	24
SHL217-06X04	G <sup>3</sup> / <sub>4</sub>	R <sup>1</sup> / <sub>2</sub>	35	20	85	24	16.0	10.0	30
SHL217-08X06	G 1	R <sup>3</sup> / <sub>4</sub>	40	22	101	28	21.5	16.0	36

## SMS 1



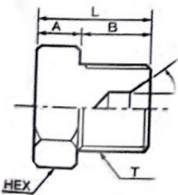
PART NUMBER	T	A	B	L	HEX
SMS1-01	G $\frac{1}{8}$	7	13.0	20.0	14
SMS1-02	G $\frac{1}{4}$	8	16.0	24.0	17
SMS1-03	G $\frac{3}{8}$	8	17.5	25.5	19
SMS1-04	G $\frac{1}{2}$	10	20.0	30.0	22
SMS1-06	G $\frac{3}{4}$	12	21.5	33.5	32
SMS1-08	G 1	14	22.5	36.5	36
SMS1-10	G $1\frac{1}{4}$	14	27.0	41.0	46
SMS1-12	G $1\frac{1}{2}$	14	27.0	41.0	50
SMS1-16	G 2	17	30.0	47.0	60

## SMS 2



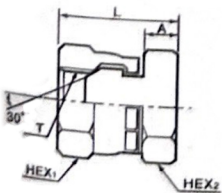
PART NUMBER	T	A	L	HEX <sub>1</sub>	HEX <sub>2</sub>
SMS2-01	G $\frac{1}{8}$	6	19	14	14
SMS2-02	G $\frac{1}{4}$	8	25	19	17
SMS2-03	G $\frac{3}{8}$	8	27	22	19
SMS2-04	G $\frac{1}{2}$	10	32	27	22
SMS2-06	G $\frac{3}{4}$	12	35	36	32
SMS2-08	G 1	14	40	41	36
SMS2-10	G $1\frac{1}{4}$	14	43	50	46
SMS2-12	G $1\frac{1}{2}$	14	43	60	50
SMS2-16	G 2	17	52	70	60

## SMS 3



PART NUMBER	T	A	B	L	HEX
SMS3-02	G $\frac{1}{4}$	8	13	21	17
SMS3-03	G $\frac{3}{8}$	8	15	23	19
SMS3-04	G $\frac{1}{2}$	10	18	28	22
SMS3-06	G $\frac{3}{4}$	12	20	32	32
SMS3-08	G 1	14	22	36	36
SMS3-10	G $1\frac{1}{4}$	14	24	38	46
SMS3-12	G $1\frac{1}{2}$	14	24	38	50
SMS3-16	G 2	17	28	45	60

## SMS 4



PART NUMBER	T	A	L	HEX <sub>1</sub>	HEX <sub>2</sub>
SMS4-02	G $\frac{1}{4}$	8	25	19	17
SMS4-03	G $\frac{3}{8}$	8	27	22	19
SMS4-04	G $\frac{1}{2}$	10	32	27	22
SMS4-06	G $\frac{3}{4}$	12	35	36	32
SMS4-08	G 1	14	40	41	36
SMS4-10	G $1\frac{1}{4}$	14	43	50	46
SMS4-12	G $1\frac{1}{2}$	14	43	60	50
SMS4-16	G 2	17	52	70	60

**H**ose

***adapter***

***Booklet***

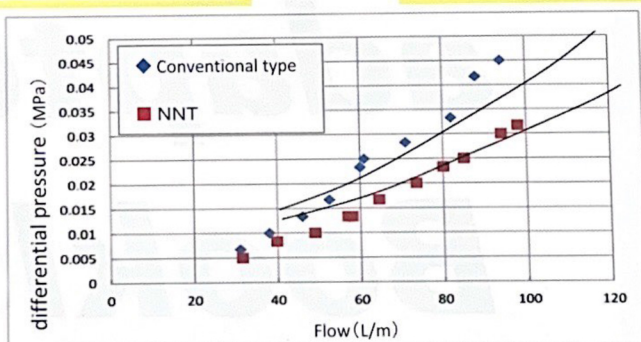
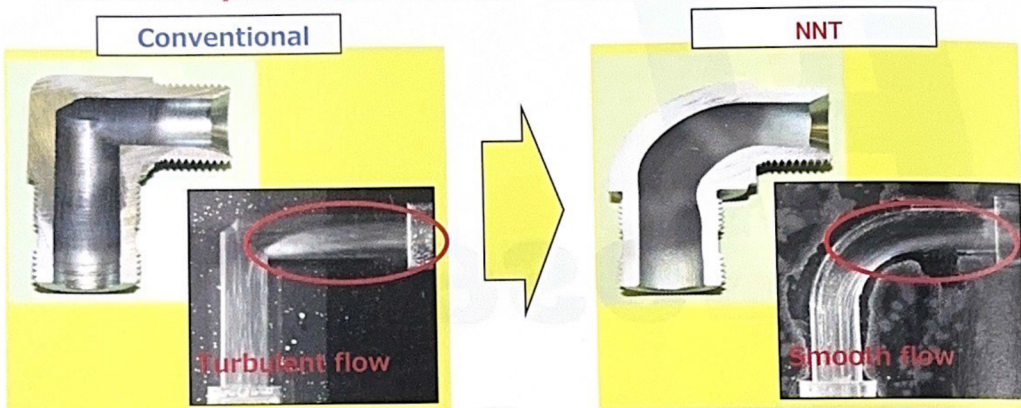
***(NNT series)***



# NNT Smooth Flow Fitting

Flow smoothly  $\Rightarrow$  LOW Pressure drop · Noise · Vibration

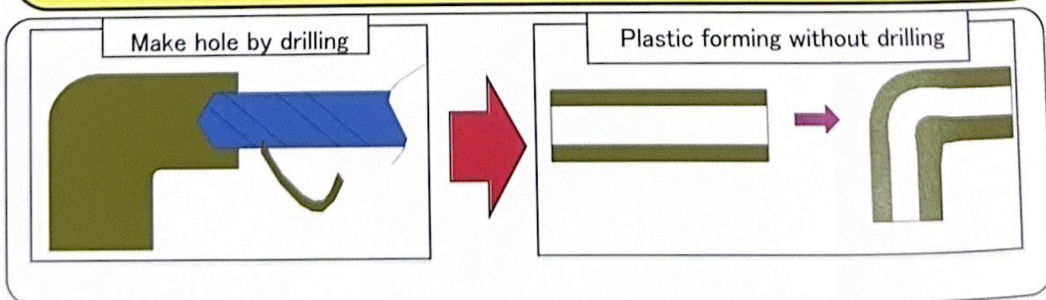
Reduce pressure drop, Save wasteful energy







Features of NNT

- Reduce pressure drop by 20% by curved flow path (60L/min)
- Reduce noise by 2~3dB

NNT is made by different manufacturing concept



## Comparison table / conventional fitting and NNT

Conventional		Items	NNT						
Ref. photo	Weight		Weight	Ref. photo					
	293g <i>116g</i>	Weight raw material	177g						
	202g <i>52g</i>	Weight product	150g						
	91g <i>64g cut 70%</i>	Weight chips	27g	<b>Save energy</b>					
<b>Noise</b>	Size	Type	Flow rate·velocity·oil temp	2MPa Normal flow	0→10MPa Impulsive flow				
	3/8 Hole size Φ 7.5	NHL201 (NNT)	F-R: 54. 5L/min F-V: 20. 57m/s O-T: 46~47°C	<b>82.6</b>	<b>84.4</b>				
		SHL201 (Conv)		<b>84.7</b>	<b>87.8</b>				
	Noise around			49.0	55.8				
<b>Vibration</b>	Size	Mes. point	Sample	Vibration acceleration m/s <sup>2</sup> (peak value)			F-R	O-T	Press
			Hose 3/8	X-direction	Y-direction	Z-direction	L/min	°C	Mpa
	3/8	A	NNT	35.1 (160.5)	35.7 (162.5)	20.1 (89.3)	62.0	46.0	3.8
			Conv.	45.9 (181.2)	46.3 (203.5)	24.8 (122.4)			
		B	NNT	34.6 (137.5)	39.6 (161.7)	15.9 (72.1)			
		Conv.	41.7 (192.6)	55.1 (294.4)	30.3 (133.0)				

## NNT compliant products

<b>Hose fitting</b>	<b>NE bite type fitting</b>	<b>Split flange fitting</b>
		



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