

# Synflex Hydraulic Hose & Fittings

**ROYAL BRASS AND HOSE**

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**SYNFLEX HYDRAULIC**

**HIGH PRESSURE**

# Synflex Hose & Couplings

## 3800 (SAE 100R8)

3,500 – 5,000 psi (241 – 345 bar) working pressures



**APPLICATIONS:**

- General hydraulics
- High pressure gas and chemical transfer
- Machine tools
- Mobile equipment
- Agricultural equipment

**CONSTRUCTION:**

- Black polyurethane cover
- Braided high tensile aramid fiber reinforcement
- Nylon core tube

**FEATURES:**

- Temperature range: -40°F to 212°F (-40°C to 100°C) or to 150°F (66°C), with water-based or fire resistant fluids
- 100R8 hose performance with 100R7 hose dimensions – for coupling versatility
- Low volumetric expansion

### SPECIFICATIONS

PRODUCT I.D.			NOMINAL I.D.		MAXIMUM O.D.		MINIMUM BEND RADIUS		MAXIMUM WORKING PRESSURE		MAXIMUM BURST PRESSURE		WEIGHT		REEL QUANTITY (FT.)
RB&H #	PERMANENT COUPLING SERIES STEEL	SWAGE DIE PART # 4540-	(IN.)	(MM)	(IN.)	(MM)	(IN.)	(MM)	(PSI)	(BAR)	(PSI)	(BAR)	LBS./100 (FT.)	KG/100 (M.)	
3800-03	3903/7903	303	3/16	4.8	.432	11.0	1 1/2	38	5,000	345	20,000	1379	5.6	8.3	250
3800-04	3903/7903	304	1/4	6.4	.532	13.5	2	51	5,000	345	20,000	1379	7.9	11.8	250
3800-06	3903/7903	306	3/8	9.5	.667	16.9	2 1/2	64	4,000	276	16,000	1103	10.6	15.8	250
3800-08	3903/7903	308	1/2	12.7	.837	21.3	4	102	3,500	241	14,000	965	14.6	21.7	250

## 3R80 (SAE 100R8)

2,000 – 5,000 psi (138 – 345 bar) working pressures



**APPLICATIONS:**

- General hydraulic systems
- Hydraulic tools
- Mobile equipment
- High pressure pneumatic systems

**CONSTRUCTION:**

- Black polyurethane cover
- Braided synthetic fiber reinforcement
- Nylon core tube

**FEATURES:**

- Temperature range: -40°F to 212°F (-40°C to 100°C) or to 150°F (66°C), with water-based or fire resistant fluids
- Long life in impulse cycling and flexing
- Designed for permanent or reusable couplings

### SPECIFICATIONS

PRODUCT I.D.				NOMINAL I.D.		MAXIMUM O.D.		MINIMUM BEND RADIUS		MAXIMUM WORKING PRESSURE		MAXIMUM BURST PRESSURE		WEIGHT		REEL QUANTITY (FT.)
RB&H #	PERMANENT COUPLING SERIES STEEL	REUSABLE COUPLING SERIES STEEL	SWAGE DIE PART # 4540-	(IN.)	(MM)	(IN.)	(MM)	(IN.)	(MM)	(PSI)	(BAR)	(PSI)	(BAR)	LBS./100 (FT.)	KG/100 (M.)	
3R80-03	390H/790H	390J	HO3	3/16	4.8	0.517	13.1	1 1/2	38	5,000	345	20,000	1,379	7.7	11.5	250
3R80-04	390H/790H	390J	HO4	1/4	6.4	0.627	15.9	2	51	5,000	345	20,000	1,379	11.8	17.6	250
3R80-06	390H/790H	390J	HO6	3/8	9.5	0.767	19.5	2 1/2	64	4,000	276	16,000	1,103	14.8	22.0	250
3R80-08	390H/790H	390J	HO8	1/2	12.7	0.894	22.7	4	102	3,500	241	14,000	965	19.0	28.3	250
3R80-12	390H/790H	390J	HO12	3/4	19.1	1.138	28.9	6 1/2	165	2,250	155	9,000	620	25.6	38.1	200
3R80-16	390H	390J	HO16	1	25.4	1.472	37.4	10	254	2,000	138	8,000	552	38.5	57.3	200

**SYNFLEX HYDRAULIC**

**MEDIUM CONSTANT PRESSURE**

**APPLICATIONS:**

- Freezer applications
- Lift truck hydraulic systems
- Agricultural equipment
- Mobile equipment
- General hydraulics
- Construction

**FEATURES:**

- Temperature range: -67°F to 200°F (-54°C to 94°C)
- Lowest temperature hose
- Very flexible in low temperatures
- Abrasion resistant cover
- Extreme flexing

**Spectra 30CT (SAE 100R18)**

3,000 psi (207 bar) working pressures



**CONSTRUCTION:**

- Black polyurethane cover
- Spiraled synthetic fiber reinforcement
- Polyester core tube

**SPECIFICATIONS**

PRODUCT I.D.				HOSE I.D. (IN.)	NOMINAL INSIDE DIAMETER (IN.)	MAXIMUM OUTSIDE DIAMETER (IN.)	MINIMUM BEND RADIUS (IN.)	MAXIMUM OPERATING PRESSURE (PSI)	MINIMUM BURST PRESSURE (PSI)	WT. PER 100 FT. (LBS)
RB&H #	RB&H TWIN LINE #	PERMANENT COUPLING SERIES	SWAGE DIE PART # 4540-							
30CT-04	3770-21633	3903/7903	3V4	5/16	.32	.590	1.75	3,000	12,000	8.0
30CT-05	3770-21643	3903/7903	305	3/8	.38	.650	2.00	3,000	12,000	12.2
30CT-06	3770-21653	3903/7903	306	1/2	.50	.870	3.50	3,000	12,000	15.0
30CT-08	3770-21663	390H/790H	H08	5/8	.63	1.050	4.00	3,000	12,000	21.0

Twin and multi lines available.

**MEDIUM PRESSURE**

**3130 (SAE 100R7)**

1,000 – 3,000 psi (69 – 207 bar) working pressures



**APPLICATIONS:**

- General hydraulics
- High pressure gas transfer
- Chemical transfer

**FEATURES:**

- Temperature range: -40°F to 212°F (-40°C to 100°C) or to 150°F (66°C), with water-based or fire resistant fluids
- Low elongation
- Best value 100R7 hose

**CONSTRUCTION:**

- Black polyurethane cover
- Spiral or braided synthetic fiber reinforcement
- Nylon-lined core tube

**SPECIFICATIONS**

PRODUCT I.D.			NOMINAL I.D.		MAXIMUM O.D.		MINIMUM BEND RADIUS		MAXIMUM WORKING PRESSURE		MAXIMUM BURST PRESSURE		WEIGHT		
RB&H #	PERMANENT COUPLING SERIES STEEL	SWAGE DIE PART # 4540-	(IN.)	(MM)	(IN.)	(MM)	(IN.)	(MM)	(PSI)	(BAR)	(PSI)	(BAR)	LBS./100 (FT)	KG/100 (M.)	G/100
3130-02**	3903/7903	302	1/8	3.2	0.339	8.6	1/2	13	2,500	172	10,000	689	2.5	3.7	250
3130-03	3903/7903	303	3/16	4.8	0.429	10.9	3/4	19	3,000	207	12,000	827	4.6	6.8	250
3130-04	3903/7903	304	1/4	6.4	0.512	13.0	1 1/4	32	3,000	207	12,000	827	5.7	8.5	250
3130-05	3903/7903	305	5/16	7.9	0.596	15.1	1 3/4	44	2,500	172	10,000	689	6.9	10.3	250
3130-06	3903/7903	306	3/8	9.5	0.662	16.8	2	51	2,250	155	9,000	620	9.5	14.1	250
3130-08	3903/7903	306	1/2	12.7	0.818	20.8	3	76	2,000	138	8,000	552	14.1	21.0	250
3130-12	3903/7903	312	3/4	19.1	1.069	27.2	5	127	1,250	86	5,000	345	19.3	28.7	200
3130-16	3903/7903	316	1	25.4	1.342	34.1	8	203	1,000	69	4,000	276	26.4	39.3	200

\*\* SAE specification 100R7 does not apply to 1/8" inch size: The nylon core tube is a single-wall design and is not bonded to the reinforcement

**SYNFLEX HYDRAULIC  
MEDIUM PRESSURE**

**3580**

2,250 – 3,500 psi (155 – 241 bar) working pressures  
Meets or exceeds SAE 100R1 and R7 performance specifications  
Steel wire reinforcement



**APPLICATIONS:**

- Hydraulic tools (not recommended for pneumatic pressures)
- Lubrication systems
- Mobile hydraulics
- Agriculture equipment

**CONSTRUCTION:**

- Black polyurethane non-perforated cover
- Braided bronze coated steel wire reinforcement
- Polyester core tube

**FEATURES:**

- Temperature range: -40°F to 225°F (-40°C to 107°C) or to 140°F (60°C), with water-based or fire resistant fluids
- Single permanent coupling series fits all sizes
- SAE 100R7 dimensions
- Cut resistant – heavy duty design

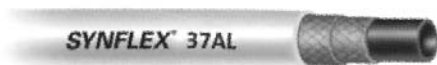
**SPECIFICATIONS**

PRODUCT I.D.			NOMINAL I.D.		MAXIMUM O.D.		MINIMUM BEND RADIUS		MAXIMUM WORKING PRESSURE		MAXIMUM BURST PRESSURE		WEIGHT		
RB&H #	PERMANENT COUPLING SERIES STEEL	SWAGE DIE PART # 4540-	(IN.)	(MM)	(IN.)	(MM)	(IN.)	(MM)	(PSI)	(BAR)	(PSI)	(BAR)	LBS./100 (FT.)	KG/100 (M.)	G/100
3580-04	3903/7903	304	¼	—	.4930	—	1 ¾	—	3,500	241	14,000	965	10.3	15.3	500
3580-06	3903/7903	306	⅜	—	.6413	—	2 ¼	—	3,250	221	13,000	884	18.1	26.9	500
3580-08	3903/7903	308	½	—	.7680	—	3 ¼	—	3,000	207	12,000	827	20.7	30.8	400

**NON-CONDUCTIVE**

**37AL (SAE 100R7)**

MEDIUM PRESSURE



**APPLICATIONS:**

- General hydraulic systems that may contact high voltage sources
- Rescue equipment and tools
- Mobile machinery
- Aerial equipment

**CONSTRUCTION:**

- Core Tube - polyester
- Reinforcement - braided synthetic fiber
- Jacket - Orange, non-conductive polyurethane

**FEATURES:**

- SAE J517, ANSI 92.2 for aerial lift equipment
- Temperature range: -40°F to +212°F
- Improved flexibility

**SPECIFICATIONS**

RB&H #	RB&H TWIN LINE #	NOMINAL I.D. (IN.)	COUPLING SERIES	DIE 4540-	NOMINAL I.D. (IN.)	MAX O.D.	MINIMUM BEND RADIUS (IN.)	MAXIMUM OPERATING PRESSURE (PSI)	MINIMUM BURST PRESSURE (PSI)	WT. PER 100 FT. (LBS)
37AL-03003	—	⅜	3903	30300	.20	.425	.75	3,000	12,000	4.8
37AL-04003	3770-27A33	¼	3903	3V400	.25	.485	1.25	3,000	11,000	6.0
37AL-05003	—	5/16	3903	30500	.32	.580	1.75	3,000	10,000	7.5
37AL-06003	3770-27A53	⅜	3903	30600	.38	.635	2.00	3,000	9,000	9.5
37AL-08003	3770-27A63	½	3903	30800	.50	.815	3.00	3,000	9,000	14.3

**SYNFLEX HYDRAULIC**

**GENERAL PURPOSE AIR & WATER**

**3630**

250 – 300 psi (17 – 20 bar) working pressures

**APPLICATIONS:**

- Air power tools
- Pneumatic motion control
- Industrial water supply lines
- Compatible with many chemicals and gases

**CONSTRUCTION:**

- PVC cover
- Spiraled synthetic fiber reinforcement
- PVC core tube

**FEATURES:**

- Temperature range: -10°F to 150°F (-23°C to 66°C) or to 130°F (54°C), with 390C brass couplings
- Standard bold colors, gray, red, blue, yellow, or black (standard color chart below)
- Excellent abrasion and impact resistance
- Light weight
- 4:1 burst to working pressure safety factor
- Long life over rubber hoses



**FOR COLORS**

ADD TO END OF PART NUMBER				
FOR BLUE	FOR RED	FOR GREEN	FOR YELLOW	FOR GRAY
BL	R	GR	Y	GY

EXAMPLE:

**SPECIFICATIONS**

RB&H #	NOMINAL I.D.		MAXIMUM O.D.		MINIMUM BEND RADIUS		MAXIMUM WORKING PRESSURE		MAXIMUM BURST PRESSURE		WEIGHT		REEL QUANTITY (FT)
	(IN.)	(MM)	(IN.)	(MM)	(IN.)	(MM)	70°F		80°F		LBS./100 (FT)	KG/100 (M.)	
							(PSI)	(BAR)	(PSI)	(BAR)			
3630-03	3/16	4.8	.399	10.1	7/16	11	300	20	250	17	4.5	6.7	500
3630-04	1/4	6.4	.490	12.5	5/8	16	300	20	250	17	6.3	9.4	500
3630-05	5/16	7.9	.550	14.0	3/4	19	300	20	250	17	7.9	11.8	500
3630-06	3/8	9.5	.639	16.2	7/8	22	300	20	250	17	9.7	14.4	500
3630-08	1/2	12.7	.794	20.2	1 1/4	32	300	20	250	17	13.6	20.2	400
3630-12	3/4	19.1	1.097	27.9	2 1/2	64	300	20	250	17	22.9	34.1	400
3630-16	1	25.4	1.342	34.1	3 1/2	89	250	17	250	17	31.4	46.7	400

**COUPLING CHART**

HOSE I.D. (IN.)	PERMANENT STEEL		BRASS COUPLINGS			
	COUPLING SERIES #	SWAGE DIE #	COUPLING SERIES #	BRASS FERRULES #	SWAGE DIE #	CRIMP DIE #
3/16	3903/7903	4540-303	390C	3981-30220	4540-00001	4548-03750
1/4	3903/7903	4540-304	390C	3981-30320	4540-00002	4548-05000
5/16	3903/7903	4540-305	-	-	4540-00003	-
3/8	3903/7903	4540-306	390C	3981-19120	-	4548-06000
1/2	3903/7903	4540-308	390C	3981-30420	-	4548-07500
3/4	3903/7903	4540-312	390C	3981-30520	-	4548-10750
1	390H-16	4540-B16	-	-	-	-

**SYNFLEX HYDRAULIC**

**ACCESSORIES**

**Hose Accessories**

**Plastic Protective  
Coil Sleeve**



**SPECIFICATIONS**

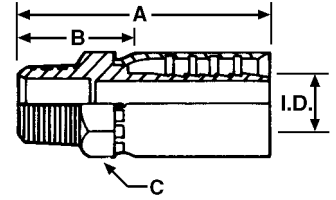
RB&H #	FOR HOSE PART #
4554-04000	3130-02
4554-06000	3R30-03, 3800-03, 3402-03, 3000-03, 3130-03, 3630-03, 3160-03
4554-07000	3R30-04, 3000-04, 3130-04, 3160-04, 3630-03
4554-08000	3R30-06, 3800-04, 3440-04, 34PW-04, 3290-04, 3402-04, 3350-03 3360-03, 3000-05, 3130-05, 3R80-03, 3160-03
4554-10000	3350-04, 3360-08, 3350-05, 3360-05, 3440-06, 34PW-06, 34AG-04, 3000-06 3130-06, 3R80-04, 3160-06
4554-12000	3R30-08, 3350-06, 3360-06, 3800-06, 3000-08, 3130-08, 3R80-06, 3160-08
4554-14000	3350-08, 3360-08, 3800-08, 3440-08, 34PW-08, 3R80-08
4554-16000	3000-12, 3130-12, 3R80-12, 3440-10, 34PW-10, 3160-12, 3630-12
4554-19000	3000-16, 3440-12, 34PW-12, 3160-16
4554-22000	3R80-16, 3440-16, 34PW-16

**SYNFLEX HYDRAULIC**

**COUPLINGS**

**Permanently Attached Hose Couplings  
Male Pipe Rigid**

*Synflex*®



**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	"C" HEX (IN.)
RB&H #	RB&H PUSHER 4599-						
3903-02102	MP023	1/8	1/8	.078	1.343	3/4	1/2
3903-03102	MP001	3/16	1/8	.109	1.880	1 1/16	9/16
3903-03104	MP004	3/16	1/4	.109	2.060	1 1/4	11/16
3903-03106	MP005	3/16	3/8	.109	2.154	1 3/8	3/4
3903-04102	MP002	1/4	1/8	.156	2.130	1 1/16	5/8
3903-04104	MP004	1/4	1/4	.156	2.310	1 1/4	11/16
3903-04106	MP005	1/4	3/8	.156	2.404	1 5/16	3/4
3903-05104	MP004	5/16	1/4	.219	2.313	1 1/16	11/16
3903-05106	MP005	5/16	3/8	.219	2.407	1 1/8	3/4
3903-06104	MP005	3/8	1/4	.281	2.592	1 1/8	3/4
3903-06106	MP005	3/8	3/8	.281	2.592	1 1/8	3/4
3903-06108	MP009	3/8	1/2	.281	2.844	1 3/8	15/16
3903-08106	MP008	1/2	3/8	.391	2.782	1 1/8	7/8
3903-08108	MP009	1/2	1/2	.391	3.031	1 3/8	15/16
3903-12112	MP011	3/4	3/4	.625	3.220	1 3/8	1 1/8
3903-16116	MP013	1	1	.812	3.969	1 9/16	1 3/8
390H-03102	MP001	3/16	1/8	.109	1.880	1 1/16	9/16
390H-03104	MP004	3/16	1/4	.109	2.060	1 1/4	11/16
390H-03106	MP005	3/16	3/8	.109	2.154	1 3/8	3/4
390H-04102	MP002	1/4	1/8	.156	2.130	1 1/16	5/8
390H-04106	MP005	1/4	3/8	.156	2.404	1 5/16	3/4
390H-05104	MP004	5/16	1/4	.219	2.313	1.063	11/16
390H-06104	MP005	3/8	1/4	.281	2.592	1 1/8	3/4
390H-06106	MP005	3/8	3/8	.281	2.592	1 1/8	3/4
390H-06108	MP009	3/8	1/2	.281	2.844	1 3/8	15/16
390H-08106	MP008	1/2	3/8	.391	2.782	1 1/8	7/8
390H-08108	MP009	1/2	1/2	.391	3.031	1 3/8	15/16
390H-12112	MP011	3/4	3/4	.625	3.220	1 3/8	1 1/8
390H-16116	MP013	1	1	.812	3.969	1 9/16	1 3/8
390V-03104	MP004	3/16	1/4	.109	2.060	1 1/4	11/16
390V-03106	MP005	3/16	3/8	.109	2.154	1 5/16	3/4
390V-04104	MP004	1/4	1/4	.156	2.310	1 1/4	11/16
390V-04106	MP005	1/4	3/8	.156	2.404	1 5/16	3/4
390V-06106	MP005	3/8	3/8	.281	2.944	1 1/8	3/4
390N-12112	MP011	3/4	3/4	.625	3.298	1.694	1 1/8
390N-16116	MP013	1	1	.812	3.969	1.652	1 3/8

Couplings are manufactured from plated steel

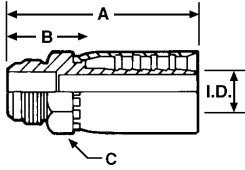
To order by phone: **1-800-669-9650**

To order by fax: **1-800-736-0141**

**SYNFLEX HYDRAULIC**

**COUPLINGS**

**JIC 37°  
Male Rigid**

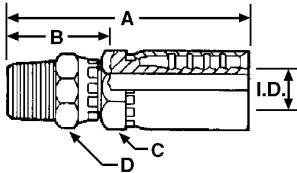


**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	DASH SIZE (IN.)	THREAD SIZE (IN.)	BORE (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	"C" CUT-OFF (IN.)
RB&H COUPLING	RB&H PUSHER 4599-							
3903-03504	MP001	3/16	-4	7/16 - 20	.109	2.050	1 1/4	9/16
3903-04504	MP002	1/4	-4	7/16 - 20	.156	2.300	1 1/4	5/8
3903-04505	MP002	1/4	-5	1/2 - 20	.156	2.300	1 1/4	5/8
3903-04506	MP005	1/4	-6	9/16 - 18	.156	2.400	1.320	3/4
3903-05506	MP004	5/16	-6	9/16 - 18	.219	2.300	1 5/16	11/16
3903-06506	MP005	3/8	-6	9/16 - 18	.281	2.588	1 3/8	3/4
3903-06508	MP007	3/8	-8	3/4 - 16	.281	2.689	1 3/8	13/16
3903-08508	MP008	1/2	-8	3/4 - 16	.391	2.876	1 7/16	7/8
3903-08510	MP009	1/2	-10	7/8 - 14	.391	3.102	1 7/16	15/16
3903-08512	MP011	1/2	-12	1 1/16 - 12	.391	3.145	1 1/2	1 1/8

Couplings are manufactured from plated steel

**Male Pipe Swivel**



**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	THREAD SIZE (IN.)	BORE (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H #	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)
3903-03144	MP003	3/16	1/4	-	.109	2.637	1 13/16	5/8	11/16
3903-04144	MP003	1/4	1/4	-	.156	2.872	1 13/16	5/8	11/16
3903-05144	MP003	5/16	1/4	-	.219	2.872	1 5/8	5/8	11/16
3903-06146	MP006	3/8	3/8	-	.281	3.150	1 11/16	3/4	3/4
3903-08148	MP010	1/2	1/2	-	.391	3.609	1 15/16	7/8	15/16
3903-12152	MP012	3/4	3/4	-	.594	3.840	2	1 1/8	1 1/8
390H-03144	MP003	3/16	1/4	-	.109	2.637	1 13/16	5/8	11/16
390H-04144	MP003	1/4	1/4	-	.156	2.872	1 13/16	5/8	11/16
390H-06146	MP006	3/8	3/8	-	.281	3.150	1 11/16	3/4	3/4
390H-08148	MP010	1/2	1/2	-	.391	3.609	1 15/16	7/8	15/16
390H-12152	MP012	3/4	3/4	-	.594	3.840	2	1 1/8	1 1/8

Couplings are manufactured from plated steel

**SYNFLEX HYDRAULIC**

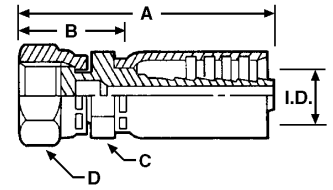
**COUPLINGS**

**Torque Values (in-lbs) for Steel Female Swivel Couplings**

<b>MAXIMUM/MINIMUM TORQUES</b>		
SIZE	MINIMUM TORQUE VALUES (LBS.)	MAXIMUM TORQUE VALUE (LBS.)
4	50	150
5	70	200
6	90	300
8	150	500
10	220	700
12	300	1,000
16	450	1,400

The maximum torques listed are based upon strength rather than sealing properties. Use of any torque within the min-max range will help prevent damage or leakage.

**JIC 37° Female Swivel**



**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	THREAD SIZE (IN.)	BORE (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)
3903-02543	FP017	1/8	-3	3/8 - 24	.078	1.650	1 1/32	1/2	9/16
3903-02544	FP010	1/8	-4	7/16 - 20	.078	1.713	1 1/16	1/2	5/8
3903-03544	FP011	3/16	-4	7/16 - 20	.109	2.156	1 3/8	9/16	5/8
3903-04544	FP012	1/4	-4	7/16 - 20	.156	2.531	1 7/16	5/8	5/8
3903-04545	FP013	1/4	-5	1/2 - 20	.156	2.531	1 7/16	5/8	3/4
3903-04545-003	FP012	1/4	-5	1/2 - 20	.156	2.531	1 7/16	5/8	5/8
3903-04546	FP013	1/4	-6	9/16 - 18	.156	2.531	1 7/16	5/8	3/4
3903-05545	FP013	5/16	-5	1/2 - 20	.219	2.531	1 1/4	5/8	3/4
3903-05546	FP013	5/16	-6	9/16 - 18	.219	2.531	1 3/8	5/8	3/4
3903-06546	FP015	3/8	-6	9/16 - 18	.281	2.813	1 1/2	3/4	3/4
3903-06548	FP005	3/8	-8	3/4 - 16	.281	2.813	1 3/8	3/4	15/16
3903-08548	FP016	1/2	-8	3/4 - 16	.391	3.156	1 5/8	7/8	15/16
3903-08550	FP006	1/2	-10	7/8 - 14	.391	3.156	1 5/8	7/8	1 1/16
3903-12552	FP008	3/4	-12	1 1/16 - 12	.625	3.437	1 5/8	1 1/8	1 1/4

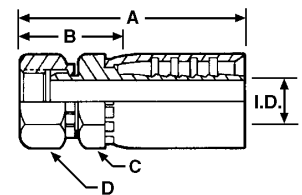
Couplings are manufactured from plated steel

**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	THREAD SIZE (IN.)	BORE (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)
3903-02244	FP024	1/8	-4	1/4 - 18	.078	1.688	1 1/16	1/2	11/16
3903-03244	FP002	3/16	-4	1/4 - 18	.109	2.075	1 1/8	5/8	3/4
3903-04244	FP002	1/4	-4	1/4 - 18	.156	2.375	1 5/16	5/8	3/4
3903-05244	FP013	5/16	-4	1/4 - 18	.219	2.530	1 1/4	3/4	3/4
3903-06246	FP004	3/8	-6	3/8 - 18	.281	2.656	1 3/16	3/4	7/8
3903-08248	FP018	1/2	-8	1/2 - 14	.391	3.062	1 3/8	1	1

Couplings are manufactured from plated steel

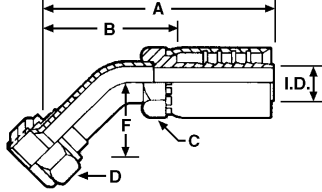
**30° Inverted Flare NPSM**



**SYNFLEX HYDRAULIC**

**COUPLINGS**

**45° Bent Tube  
Female Swivel  
JIC 37°**

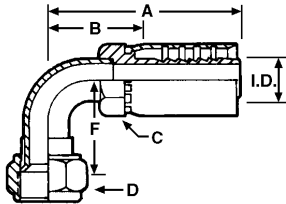


**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	THREAD SIZE (IN.)	BORE (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX		"F" DROP (IN.)
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)	
3903-05606	TP206	5/16	-6	9/16 - 18	.219	2.734	1 1/2	5/8	1 1/16	.588
3903-06606	TP206	3/8	-6	9/16 - 18	.281	2.921	1 1/2	3/4	1 1/16	.588

Couplings are manufactured from plated steel

**90° Short Bent Tube  
Female Swivel  
JIC 37°**



**Torque Values (in-lbs) for Bent Tube  
Couplings With Female Swivels**

**MAXIMUM/MINIMUM TORQUES**

SIZE	MINIMUM TORQUE VALUES (LBS.)	MAXIMUM TORQUE VALUE (LBS.)
4	37	112
5	52	150
6	67	225
8	112	375
10	162	525
12	225	750
16	337	1,050

The maximum torques listed are based upon strength rather than sealing properties. Use of any torque within the min-max range will help prevent damage or leakage.

**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	DASH SIZE (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX		"F" DROP (IN.)
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)	
3903-03644	TP204	3/16	-4	7/16 - 20	.109	2.063	1 1/4	9/16	9/16	.875
3903-04644	TP204	1/4	-4	7/16 - 20	.156	2.281	1 5/16	5/8	9/16	.875
3903-04645	TP205	1/4	-5	1/2 - 20	.156	2.375	1 5/16	5/8	5/8	1.000
3903-05646	TP206	5/16	-6	9/16 - 18	.219	2.438	1 3/16	5/8	1 1/16	1.125
3903-06646	TP206	3/8	-6	9/16 - 18	.281	2.625	1 3/16	3/4	1 1/16	1.125
3903-06648	TP208	3/8	-8	3/4 - 16	.281	2.751	1 5/16	3/4	7/8	1.375
3903-08648	TP308	1/2	-8	3/4 - 16	.391	2.938	1 5/16	7/8	7/8	1.375
3903-08650	TP310	1/2	-10	7/8 - 14	.391	3.062	1 7/16	7/8	1	1.625

Couplings are manufactured from plated steel

**SYNFLEX HYDRAULIC**

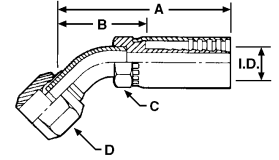
**COUPLINGS**

**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)
3903-04404	MP045	1/4	-4	9/16 - 18	.156	2.597	1.517	5/8	1 1/16
3903-06406	MP037	3/4	-6	1 1/16 - 16	.209	2.920	1.608	3/4	1 3/16
3903-08408	MP046	1/2	-8	1 3/16 - 16	.382	3.285	1.720	7/8	1 5/16
3903-12412	MP039	3/4	-12	1 3/16 - 12	.610	3.710	1.954	1 1/8	1 3/8
3903-16416	MP042	1	-16	1 7/16 - 12	.811	4.360	2.110	1 3/8	1 5/8
3903-05404	MP045	5/16	-4	9/16 - 18	.219	2.66	1.475	5/8	1 1/16
3903-05406	MP037	5/16	-6	1 1/16 - 16	.219	2.73	1.545	5/8	1 3/16

Couplings are manufactured from plated steel

**Straight With Female Swivel O-Ring Face Seal**

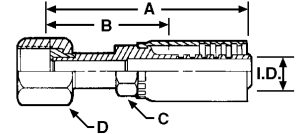


**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	PIPE SIZE (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)
390H-04404	MP045	1/4	-4	9/16 - 18	.156	2.597	1.517	5/8	1 1/16
390H-06406	MP037	3/8	-6	1 1/16 - 16	.264	2.920	1.608	3/4	1 3/16
390H-08408	MP046	1/2	-8	1 3/16 - 16	.382	3.285	1.720	7/8	1 5/16

Couplings are manufactured from plated steel

**Straight With Female Swivel O-Ring Face Seal**

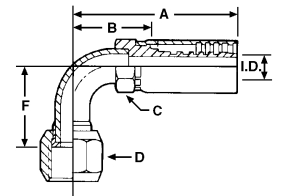


**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	DASH SIZE (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX		"F" DROP (IN.)
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)	
3903-04474	TP204	1/4	-4	9/16 - 8	.156	2.313	1.233	5/8	1 1/16	.779
3903-05476	TP206	5/16	-6	1 1/16 - 16	.281	2.550	1.368	3/4	1 3/16	.902
3903-06476	TP206	3/8	-6	1 1/16 - 16	.281	2.743	1.431	3/4	1 3/16	.902
3903-08478	TP308	1/2	-8	1 3/16 - 16	.391	3.043	1.480	7/8	1 5/16	1.150
3903-12482	TP312	3/4	-12	1 3/16 - 12	.625	3.777	2.021	1 1/8	1 3/8	1.882

Couplings are manufactured from plated steel

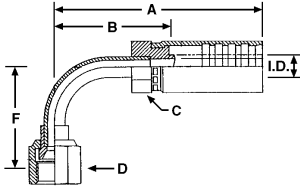
**Female Swivel 90° Elbow O-Ring Face Seal**



**SYNFLEX HYDRAULIC**

**COUPLINGS**

**BSPP  
Female Swivel  
60° Female Cone  
and 90° Elbow**

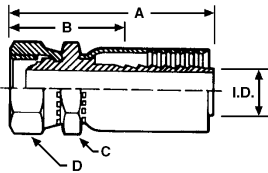


**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	DASH SIZE (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX		"F" DROP (IN.)
RB&H COUPLING	RB&H PUSHER 4599-							"C" (IN.)	"D" (IN.)	
7903-04L74	TP401	1/4	-5	1/4 - 19	.156	2.85	1.774	5/8	19	1.299
7903-06L76	TP402	3/8	-6	3/8 - 19	.281	3.30	1.989	3/4	22	1.378
7903-08L78	TP403	1/2	-8	1/2 - 14	.391	3.69	2.128	7/8	27	1.476
7903-12L82	TP404	3/4	-12	3/4 - 14	.625	4.47	3.157	1 1/8	36	1.968

Couplings are manufactured from plated steel

**BSPP Female Swivel  
60° Male Cone**

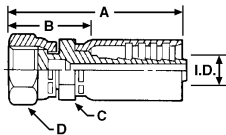


**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-						"C" (IN.)	"D" (IN.)
7903-03V44	FP413	3/16	1/4 - 19	.109	2.16	1.38	19	19
7903-04V44	FP414	1/4	1/4 - 19	.156	2.48	1.40	19	19
7903-05V46	FP416	5/16	3/8 - 19	.219	2.35	1.22	22	22
7903-06V46	FP416	3/8	3/8 - 19	.281	2.87	1.56	22	22
7903-08V48	FP418	1/2	1/2 - 14	.391	3.23	1.67	27	27
790H-03V44	FP413	3/16	1/4 - 19	.109	2.16	1.38	17	19
790H-04V44	FP414	1/4	1/4 - 19	.156	2.48	1.40	19	19
790H-06V46	FP416	3/8	3/8 - 19	.281	2.87	1.56	22	22
790H-08V48	FP418	1/2	1/2 - 14	.391	3.23	1.67	27	27

Couplings are manufactured from plated steel

**BSPP  
Female Swivel  
60° Female Cone**



**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	THREAD SIZE (IN.)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-						"C" (MM)	"D" (MM)
7903-04V04	FP414	1/4	1/4 - 19	.156	2.48	1.40	19	19
7903-06V06	FP416	3/8	3/8 - 19	.281	2.87	1.56	22	22
7903-08V08	FP418	1/2	1/2 - 14	.391	3.23	1.67	22	27
7903-12V12	FP422	3/4	3/4 - 14	.625	3.39	1.73	36	36
790H-04V04	FP414	1/4	1/4 - 19	.156	2.48	1.40	19	19
790H-06V06	FP416	3/8	3/8 - 19	.281	2.87	1.56	22	22
790H-08V08	FP418	1/2	1/2 - 14	.391	3.23	1.67	22	27

Couplings are manufactured from plated steel

**SYNFLEX HYDRAULIC**

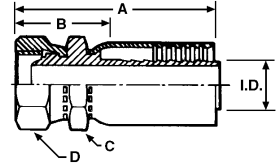
**COUPLINGS**

**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	DASH SIZE (IN.)	THREAD SIZE (MM)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	HEX	
RB&H COUPLING	RB&H PUSHER 4599-							"C" (MM)	"D" (MM)
7903-03LL1-2	FP502	3/16	—	12X1.5	.109	2.24	1.379	14	17
7903-04LL1-4	FP502	1/4	—	14X1.5	.156	2.40	1.351	17	17
7903-05LL1-6	FP503	5/16	—	16X1.5	.219	2.53	1.343	17	22
7903-06LL1-8	FP504	3/8	—	18X1.5	.281	2.72	1.406	19	22
7903-08LL2-2	FP505	1/2	—	22X1.5	.391	3.07	1.514	22	27

Couplings are manufactured from plated steel

**Metric Female Swivel  
60° Male Cone  
L Series**



**SPECIFICATIONS**

PRODUCT I.D.		HOSE I.D. (IN.)	TUBE O.D. (MM)	BORE I.D. (IN.)	"A" OVERALL LENGTH (IN.)	"B" CUT-OFF (IN.)	"C" HEX (MM)
RB&H COUPLING	RB&H PUSHER 4599-						
7903-03N06	MP501	3/16	6	.109	2.29	1.434	14
7903-04N08	MP501	1/4	8	.156	2.56	1.483	14
7903-05N10	MP502	5/16	10	.219	2.78	1.596	17
7903-05N12	MP503	5/16	12	.219	2.82	1.635	17
7903-06N12	MP503	3/8	12	.281	3.01	1.698	17
7903-08N15	MP504	1/2	15	.391	3.36	1.797	22

Couplings are manufactured from plated steel

**Metric Stand Pipe  
N Series**

