

Fire Shield Hydraulic Hose Assembly Guide

Polyhose API 16D Certified BOP Hose - PH183 Type



PURPOSE

This guide provides clear, step-by-step instructions for cutting, preparing, assembling, and crimping Fire Shield Hydraulic Hoses using two-piece fittings.

SCOPE

This procedure applies to all PH183 Fire Shield Hydraulic Hose assemblies.

REQUIRED TOOLS & EQUIPMENT

- Hose cutting machine
- External and internal skiving tools
- Compressed air (air gun)
- Crimping machine with appropriate dies
- Measuring tools (calipers or gauges)

ASSEMBLY PROCEDURE



STEP 1: CUT THE HOSE

Cut the hose to the required length using a hose cutting machine. Ensure the cut is straight and clean.

STEP 2: PREPARE THE HOSE (INTERNAL AND EXTERNAL SKIVING)

Remove outer cover and fiberglass layer, then remove inner layer to expose reinforcement. Perform internal skiving carefully without damaging reinforcement wires.

STEP 3: CLEAN THE HOSE

Use compressed air to remove all debris. Ensure the hose is clean and dry.

STEP 4: ASSEMBLE THE FITTINGS

Slide the socket onto the hose. Insert the stem/insert with a slight twisting motion until fully seated.

STEP 5: CRIMP THE HOSE

Use the correct crimping machine and dies. Follow specified crimp dimensions.

STEP 6: INSPECT AND TEST

Visually inspect, measure crimp diameter, and pressure test if required.

BEST PRACTICES

- Follow specified skiving dimensions
- Keep components clean
- Do not damage reinforcement wires
- Use calibrated equipment

SAFETY NOTES

Wear PPE and follow all shop safety procedures.

HOSE SIZE	FERRULE SERIES	INSERT SERIES (MALE API THREAD)	EXTERNAL SKIVING REQUIRED	INTERNAL SKIVING REQUIRED	EXTERNAL SKIVING LENGTH	INTERNAL SKIVING LENGTH	CRIMP DIAMETER	API 16D CERTIFIED
-06	2BP20400-060000	11075005-060600	Yes	No	0.748	N/A	1.063	No
-08	2BP20400-080000	11075005-0808000	Yes	No	0.984	N/A	1.228	Yes
-12	2BP20400-120000	11075005-121200	Yes	No	1.299	N/A	1.476	Yes
-16	2BP20400-160000	11075005-161600	Yes	No	1.457	N/A	1.772	Yes
-20	2BP30600-200000	14075005-202000	Yes	Yes	2.677	0.669	2.667	Yes
-24	2BP30600-240000	14075005-242400	Yes	Yes	3.150	0.984	3.150	Yes
-32	2BP30600-320000	14075005-323200	Yes	Yes	3.425	1.023	3.425	No