



HYDRAULIC HOSE & FITTINGS

TEXCELHYDRAULICS.COM



Ahead Of The Curve.

Founded in 1981, Texcel offers a full line of industrial hose, fluid sealing products and hydraulic solutions.

Backed by "The Texcel Guarantee," Texcel has become known for delivering exceptional customer support and providing in-depth inventory of leading edge products to respond to customer demand—whether a quick solution to fill a product gap or as a full line supplier. Texcel's commitment to making a difference for customers is evident in every aspect of the business—particularly in building partnerships of trust to support customers' success.

With the introduction of Texcel's hydraulics, customers have access to a full line of high-quality products and the same error-free service and personalized support they have come to expect from Texcel for more than 35 years.





100% SAME-DAY SHIPPING*

By ordering from Texcel, there are no delays in shipping your stock and priority orders, meaning your shipment arrives faster for orders received by 5 p.m. CST.



24-HOUR RESPONSE TEAM

Whether you have an emergency or simply need dependable products quickly, our team is available around the clock to make sure you receive the products and services you need.



LARGE INVENTORY

We keep deep product inventories, which are strategically located at our regional warehouses, so you will always have the product you need, when you need it most.

*Subject to carrier availability



WARNING

Improper selection of hoses, fittings, coupling terminations, assemblies and accessories can cause equipment malfunctions and failures, environmental issues, personal injury or even death. Follow Texcel crimp specifications and guidelines for the proper selection of all hydraulic products (hoses, fittings, and accessories). Texcel strongly recommends using SAE J1273 specification – Surface Vehicle Recommended Practice and NAHAD Fabrication Guide for Hydraulic Hose Assemblies as a safety guideline for selecting components, fabrication and installation. Texcel disclaims all liability for any hose assembly made in violation of Texcel's recommendations, procedures and current crimp data. Contact Texcel for updated product and crimp specifications and procedures as necessary.



TEXCEL SAFETY TIPS FOR HYDRAULIC HOSE ASSEMBLIES

1. **WARNING!** Use only hose and fittings from manufacturers who have tested and qualified the compatibility of their products. Texcel manufactured products are rigorously tested to adhere to industry safety and performance guidelines. **DO NOT** mix or match hose and fittings that are not tested, qualified and approved by Texcel. Use only new products and follow Texcel crimp specifications to properly fabricate hose assemblies.
2. Select and carefully install hose assemblies according to the Texcel crimp specification.
3. **DO NOT** use any damaged or worn out hose, fittings or hose assemblies.
4. **The pressure rating of a hydraulic hose assembly is not to exceed the working pressure of the lowest rated component in the hose assembly. Maximum working pressure includes the highest pressure the system will experience, such as spikes, surges and water hammer effects.** (For example: If a system consists of a hose rated at 3000 PSI and the termination rated at 2000 PSI, the hose assembly should never be used in excess of 2000 PSI.)
5. The application temperature and pressure must be lower than the temperature and pressure rating of all hydraulic hose and fittings.
6. The hose must not be stretched, kinked, crushed, or twisted during the installation or use. Hose must not be bent to less than the minimum bend radius.
7. The bend radius of the application must be larger than the recommended bend radius.
8. Receive hands-on training before using any Texcel recommended equipment.
9. Wear safety glasses.
10. Follow all the guidelines of Texcel's operating manual and crimp specifications.
11. **DO NOT** run your hand over or touch any pressurized hose assemblies with any part of the body. Always turn off all equipment before inspecting any hose assembly.
12. Only properly trained personnel should inspect, test or service hose assemblies and components. Update training periodically.
13. The routing of the hose assembly must not create an injury hazard or damage of any component of the hose assembly. Refer to the standards and regulations that apply in the countries where the equipment is sold and used.
14. Apply the best practice of hose assembly fabrication.
15. Document and track all of the maintenance, inspection and testing.



TABLE OF CONTENTS



HYDRAULIC HOSE PRODUCTS

Hose Features & Layline,	13
Hydraulic Hose Summary,	15
HB3K TERA-GLIDE, 3,000 PSI Braided Isobaric High Abrasion Resistant Hose	19
HB3KXT TERA-GLIDE XT, 3,000 PSI Braided Isobaric Extreme Abrasion Resistant Hose	20
HB4K TERA-GLIDE, 4,000 PSI Braided Isobaric High Abrasion Resistant Hose	21
HB5K TERA-GLIDE, 5,000 PSI Braided Isobaric High Abrasion Resistant Hose	22
HB5KXT TERA-GLIDE XT, 5,000 PSI Braided Isobaric Extreme Abrasion Resistant Hose	23
HB6K TERA-GLIDE, 6,000 PSI Braided Isobaric High Abrasion Resistant Hose	24
HS3K TERA-GLIDE, 3,000 PSI Spiral Isobaric High Abrasion Resistant Hose	25
HS4K TERA-GLIDE, 4,000 PSI Spiral Isobaric High Abrasion Resistant Hose	26
HS5K TERA-GLIDE, 5,000 PSI Spiral Isobaric High Abrasion Resistant Hose	27
HS5KXT TERA-GLIDE XT, 5,000 PSI Spiral Isobaric Extreme Abrasion Resistant Hose	28
HS6K TERA-GLIDE, 6,000 PSI Spiral ISOBARIC High Abrasion Resistant Hose	29
HBR1 TERA-GLIDE, R1AT Braided High Abrasion Resistant Hose	30
HBR2 TERA-GLIDE, R2AT Braided High Abrasion Resistant Hose	31
HHT2, Hi-Temp R2AT Braided Hose	32
HBJK TERA-GLIDE, Jack Hose With Abrasion Resistant Cover	33
HBR4, Low Pressure Suction Return Hose	34
HBR5, R5 Braided Hose	35
HBHTR5, R5 Braided Hose	36
TEX-PUSH-ON 300, 300 PSI Push-on Hose	37
BR14, 100R14 Stainless steel Braided PTFE Hose	38
TR7, R7 Thermoplastic Hose	39
TTR7, R7 Twin Line Thermoplastic Hose	40
TNCR7, R7 Non Conductive Thermoplastic Hose	41
TTNCR7, R7 Non Conductive Twin Line Thermoplastic Hose	42
TR8, R8 Thermoplastic Hose	43
TTR8, R8 Twin Line Thermoplastic Hose	44
TNCR8, R8 Non Conductive Thermoplastic Hose	45
HPNS, Nylon Hose Sleeve	46
HPPS, Plastic Spiral Guard	47



FITTING PRODUCTS

How to read Fittings part numbers	49
Fittings Terminology	50
Fittings Summary Pages	52
F2-PM, NPT Male	56
F2-PM-S, NPT Male Stainless Steel	57
F2-PM-X, API Male Extended	58
F2-PMS, NPT Male Swivel	59
F2-PMS90, NPT Male Swivel 90° Bend	60
F2-PF, NPT Female	61
F2-PFS, NPSM Female Swivel	62
F2-JM, JIC Male	63
F2-JFS, JIC Female Swivel	64
F2-JFS-S, JIC Female Swivel Stainless Steel	65



FITTING PRODUCTS



TABLE OF CONTENTS

F2-JFS45M , JIC Female Swivel 45° Bent Tube Medium Drop	66
F2-JFS90M , JIC Female Swivel 90° Bent Tube Medium Drop	67
F2-JFS90M-S , JIC Female Swivel 90° Bent Tube Stainless Steel	68
F2-JFS90L , JIC Female Swivel 90° Bent Tube Long Drop	69
F2-SM , SAE Male	70
F2-SFS , SAE Female Swivel	71
F2-SFS90 , SAE Female Swivel 90° Bent Tube Medium Drop	72
F2-OM , ORFS Male	73
F2-OFS , ORFS Female Swivel	74
F2-OFS45M , ORFS Female Swivel 45° Bent Tube Medium Drop	75
F2-OFS90M , ORFS Female Swivel 90° Bent Tube Medium Drop	76
F2-OFS90L , ORFS Female Swivel 90° Bent Tube Long Drop	77
F2-OBM , O-Ring Boss Male	78
F2-OBMS , O-Ring Boss Male Swivel	79
F2-OBMS90 , O-Ring Boss Male Swivel 90° Bend	80
F2-FL , Code 61 Flange	81
F2-FL45 , Code 61 Flange 45° Bend	82
F2-FL90 , Code 61 Flange 90° Bend	83
F2-MIS , Inverted Swivel Male	84
F2-MIS45 , Inverted Swivel Male 45° Bent Tube	85
F2-MIS90 , Inverted Swivel Male 90° Bent Tube	86
F2-BRF , Braze On Female	87
F2-MFL , Flareless Male	88
F2-JNR , Joiner	89
F2-FG , Grease Line Female	90
F2-PWFS , Pressure Washer Female Swivel	91
F2-BPM , BSP Parallel Male	92
F2-BTM , BSP Taper Male	93
F2-BFS , BSP Female Swivel	94
F2-BSPFS45 , BSP Female Swivel 45° Bent Tube	95
F2-BSPFS90 , BSP Female Swivel 90° Bent Tube	96
F2-BSPFS90-B , BSPP Female Swivel 90° Bent Tube - Block Style	97
F2-DLM , DKL Male	98
F2-DLFS , DKOL Female Swivel	99
F2-DLFS45 , DKOL Female Swivel 45° Bent Tube	100
F2-DLFS90 , DKOL Female Swivel 90° Bent Tube	101
F2-DHM , DKS Male	102
F2-DHFS , DKOS Female Swivel	103
F2-DHFS45 , DKOS Female Swivel 45° Bent Tube	104
F2-DHFS90 , DKOS Female Swivel 90° Bent Tube	105
F2-JISS , JIS Female Swivel 30° Seat	106
F2-KFS , Komatsu Female Swivel 30° Seat	107
F2-KFS45 , Komatsu Female Swivel 30° Seat 45° Bent Tube	108
F2-KFS90 , Komatsu Female Swivel 30° Seat 90° Bent Tube	109
F5-PM , NPT Male	110
F5-JFS , JIC Female Swivel	111
F5-JFS90M , JIC Female Swivel 90° Bent Tube Medium Drop	112



TABLE OF CONTENTS



FITTING PRODUCTS

F5-SFS , SAE Female Swivel	113
F4-PM , NPT Male	114
F4-PM-S , NPT Male Stainless Steel	115
F4-PM-X , NPT API male Extended	116
F4-JM , JIC Male	117
F4-JFS , JIC Female Swivel	118
F4-JFS-S , JIC Female Swivel Stainless Steel	119
F4-JFS45M , JIC Female Swivel 45° Bent Tube Medium Drop	120
F4-JFS90M , JIC Female Swivel 90° Bent Tube Medium Drop	121
F4-JFS90L , JIC Female Swivel 90° Bent Tube Long Drop	122
F4-OM , ORFS Male	123
F4-OFS , ORFS Female Swivel	124
F4-OFS45M , ORFS Female Swivel 45° Bent Tube Medium Drop	125
F4-OFS90M , ORFS Female Swivel 90° Bent Tube Medium Drop	126
F4-OFS90L , ORFS Female Swivel 90° Bent Tube Long Drop	127
F4-OBM , ORB male	128
F4-FL , Code 61 Flange	129
F4-FL22.5 , Code 61 Flange 22.5° Bend	130
F4-FL30 , Code 61 Flange 30° Bend	131
F4-FL45 , Code 61 Flange 45° Bend	132
F4-FL60 , Code 61 Flange 60° Bend	133
F4-FL67.5 , Code 61 Flange 67.5° Bend	134
F4-FL90 , Code 61 Flange 90° Bend	135
F4-FL90L , Code 61 Flange 90° Long Bend	136
F4-FLH , Code 62 Flange	137
F4-FLH45 , Code 62 Flange 45° Bend	138
F4-FLH90 , Code 62 Flange 90° Bend	139
F4-FLH90L , Code 62 Flange 90° Long Bend	140
F4-FLHC , Code 62 CAT Flange 45° Bend	141
F4-FLH45C , Code 62 CAT Flange 45° Bend	142
F4-FLH90C , Code 62 CAT Flange 90° Bend	143
F4-BRF , Braze Female Solid	144
F4-BPM , BSPP Male	145
F4-BTM , BSP Taper Male	146
F4-BFS , BSPP Female Swivel	147
F4-BSPFS45 , BSP Female Swivel 45° Bent Tube	148
F4-BSPFS90 , BSP Female Swivel 90° Bent Tube	149
F4-BSPFS90-B , BSP Female Swivel 90° Bent Tube - Block	150
F4-DLFS , X 2 DKOL Female Swivel	151
F4-DHM , Metric DIN Heavy Male	152
F4-DHFS , Metric DIN Heavy Female O-Ring Swivel	153
F4-DHFS45 , DKOS Female Swivel 45° Bent Tube	154
F4-DHFS90 , DKOS Female Swivel 90° Bent Tube	155
F4-KFS , Komatsu Female Swivel 30° Seat	156
F6-PM , NPT Male	157
F6-PM-X , NPT API Male Extended	158
F6-JFS , JIC Female Swivel	159



FITTING PRODUCTS

F6-JFS45M , JIC Female Swivel 45° Bent Tube Medium Drop	160
F6-JFS90M , JIC Female Swivel 90° Bent Tube Medium Drop	161
F6-FL , Code 61 Flange	162
F6-FL45 , Code 61 Flange 45° Bend	163
F6-FL90 , Code 61 Flange 90° Bend	164
F6-FLH , Code 62 Flange	165
F6-FLH45 , Code 62 Flange 45° Bend	166
F6-FLH90 , Code 62 Flange 90° Bend	167
F6-FLHC , Code 62 Cat Flange	168
F6-FLH45C , Code 62 Cat Flange 45° Bend	169
F6-FLH90C , Code 62 Cat Flange 90° Bend	170
F6-OFS , ORFS Female Swivel	171
F6-OFS45M , ORFS Female Swivel 45° Bend Tube	172
F6-OFS90M , ORFS Female Swivel 90° Bend Tube	173
F6-BFS , BSPP Female Swivel	174
F6-BPM , BSPP Male	175
FT-PM , NPT Male Pipe	176
FT-PFS , NPSM Female Swivel	177
FT-JFS , JIC Female Swivel	178
FT-JFS90M , JIC Female Swivel 90° Bent Tube Medium Drop	179
FT-SFS , SAE Female	180
FT-BFS , BSP Female Swivel	181
FT-OFS , ORFS Female Swivel	182
FT-OBM , ORB Male	183
FT-JISS , JIS Female Swivel 30° Seat	184
FT-OM , ORFS Male	185
FS-FER , R4 SUCTION HOSE FERRULE	186
FS-PM , NPT Male Pipe	187
FS-JFS , JIC Female Swivel	188
FS-FL , Code 61 Flange	189
FS-FL45 , Code 61 Flange 45° Bend	190
FS-FL90 , Code 61 Flange 90° Bend	191



EQUIPMENT

TC100-SH / TC100-SP , 1" Service Hose Crimpers	193
TC165 , 1-1/4" Service Hose Crimper	194
TC200 / TC450 , General Production Hose Crimper	195
THC100 , 2" Cut Off Saw 220V Single Phase	197



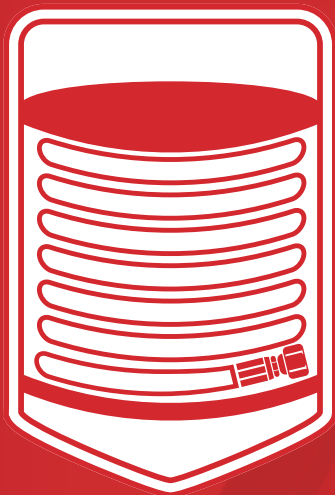
TECHNICAL

Technical ,	199
Chemical Compatibility ,	219
Torque Specification for Carbon steel ,	225
Metric Conversion Chart and Table ,	227
Pressure Units Conversion Chart ,	228
Index ,	229



TABLE OF CONTENTS

[illegible]



HYDRAULIC HOSE PRODUCTS

Hose Features & Layline	13	HBJK TERA-GLIDE	33
Hydraulic Hose Summary	15	HBR4	34
HB3K TERA-GLIDE	19	hBR5	35
HB3KXT TERA-GLIDE XT	20	hBHTR5	36
HB4K TERA-GLIDE	21	TEX-PUSH-ON 300	37
HB5K TERA-GLIDE	22	BR14	38
HB5KXT TERA-GLIDE XT	23	TR7	39
HB6K TERA-GLIDE	24	TTR7	40
HS3K TERA-GLIDE	25	TNCR7	41
HS4K TERA-GLIDE	26	TTNCR7	42
HS5K TERA-GLIDE	27	TR8	43
HS5KXT TERA-GLIDE XT	28	TTR8	44
HS6K TERA-GLIDE	29	TNCR8	45
HBR1 TERA-GLIDE	30	HPNS	46
HBR2 TERA-GLIDE	31	HPPS	47
HHT2	32		

CHANGE IS **CONSTANT**

It's time to make the change to Texcel's
constant pressure hydraulic hose line.



Today's increasing demand for higher performance from hydraulic systems and components has led Texcel to introduce the our constant pressure TERA-GLIDE Isobaric hydraulic hose line. Trust in the Texcel color coordinated laylines for ease of hose pressure identification.



HAVE **CONFIDENCE** IN THE NAME

TERA-GLIDE

Texcel's high abrasion hydraulic hose covers are the solution for even the most challenging applications.

TERA-

A prefix used in forming large units of measure (e.g. terabyte).
Meaning One trillion (10^{12}), Larger than mega (10^6)

GLIDE-

To move or cause to move easily without jerks or hesitations

XT-

Abbreviation for Xtra-Tuff used on UHMW cover





HOSE FEATURES & LAYLINE

FEATURES

At Texcel we know that your business is only as good as the products you sell, so we take pride in offering high-quality, top-tier hose products that will keep your employees safe and reduce equipment downtime due to product failure. Texcel engineering and manufacturing work to develop hydraulic solutions for the most challenging applications. Our TERA-GLIDE and TERA-GLIDE XT high abrasion hydraulic hose covers are just one of many examples of superior technology. When selecting a hydraulic hose look to Texcel to provide the best innovative product.

WHY SELECT TEXCEL ISOBARIC HOSES?

- Meets or Exceeds ISO 18752
- Each hose has a constant working pressure
- Streamlines the hose selection process
- Offers complete braided hose families in 3,000psi, 4,000psi, 5,000psi & 6,000psi and spiral hose families in 3,000psi, 4,000psi, 5,000psi & 6,000psi
- Spiral hose rated for one million cycles
- Achieves half of the SAE minimum Bend Radius offering extreme flexibility
- Available in two high abrasion cover types

Today's increasing demand for higher performance from hydraulic systems has led the hydraulic hose industry to offer constant pressure hose solutions. Texcel considered the current factors affecting hose selection- severe environmental conditions, aggressive fluids, high pressure and extreme temperature-when developing the TERA-GLIDE Isobaric hose line.

CHECK OUT TEXCEL HYDRAULIC HOSE SOLUTIONS FOR EVERY INDUSTRY!

- SAE Braided
- Hi-Temperature
- Jack Hose
- Suction & Discharge
- SAE R5
- Thermoplastic SAE-R7 & R8
- Push-On
- Stainless Steel Braided Teflon SAE R14



TEXCEL LOGO

PART NUMBER

Specifies the hose series, nominal hose size and cover type, in an easy to read format for quick ordering.

EXAMPLE: HS5KXT-12

- **H** - Hydraulic
- **S** - Spiral
- **5K** - Pressure Rating
- **XT** - Cover Type
- **12** - Hose ID

COVER TYPE

TERA-GLIDE

Abrasion cover for most applications

TERA-GLIDE XT

High abrasion cover for the harshest environments

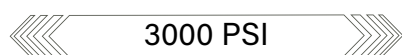
LAYLINES

Functional design for ease of mind! The Texcel hydraulic hose layline is designed to provide information effectively and efficiently. The color of the layline signifies the hose pressure rating while the verbiage will convey the product specifications and cover type. Ordering is made easy with informative Texcel layline designs.

CONSTANT PRESSURE LAYLINE COLORS



NON-CONSTANT PRESSURE LAYLINE COLOR



HOSE FEATURES & LAYLINE

MSHA APPROVAL

MSHA flame resistance certification for the hose is clearly stated and visible on the hose layline.

COUPLING TYPE

Texcel offers a matched coupling for every Texcel hydraulic hose. The recommended coupling is printed on the hose layline.

Sizes: F2, F4, F5, F6, FT, FS, FA

5500 PSI / 380 bar



MSHA IC-188/4

MEETS OR EXCEEDS
SAE 100R13 EN 856 R13 ISO 18752 DC



F4



SIZE & PRESSURE SPECIFICATION

There are three commonly used formats for the nominal hose ID.

EXAMPLE:

Shown below in appearance of order

- 3/4" (inch size)
- -12 (dash Size)
- DN19 (metric/DN Size)

Texcel Isobaric range of hose working pressures vary from 3000 psi / 210 bar to 6100 psi / 420 bar.

INDUSTRY PERFORMANCE SPECIFICATIONS

Texcel hydraulic hoses are tested and certified to assure quality and performance.



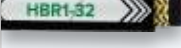
1 MILLION CYCLES ICON

Tested to 1 million impulse cycles



HYDRAULIC HOSE SUMMARY

All Texcel hoses working pressures are based on dynamic working pressure with a 4:1 safety factor except For HBJK hoses

Hose Family	Temp Range °F	-2	-4	-5	-6	-8	-10	-12
 HB3K 3,000 PSI Braided Isobaric	-40 / +212		3000		3000	3000	3000	3000
 HB3KXT 3,000 PSI XT Braided Isobaric	-40 / +212		3000		3000	3000		3000
 HB4K 4,000 PSI Braided Isobaric	-40 / +212				4100	4100	4100	4100
 HB5K 5,000 PSI Braided Isobaric	-40 / +212		5100		5100	5100		
 HB5KXT 5,000 PSI XT Braided Isobaric	-40 / +212		5100		5100	5100		
 HB6K 6,000 PSI Braided Isobaric	-40 / +212		6100		6100			
 HS3K 3,000 PSI Spiral Isobaric	-40 / +250							
 HS4K 4,000 PSI Spiral Isobaric	-40 / +250						4100	4100
 HS5K 5,000 PSI Spiral Isobaric	-40 / +250					5500	5500	5500
 HS5KXT 5,000 PSI XT Spiral Isobaric	-40 / +250							5500
 HS6K 6,000 PSI Spiral Isobaric	-40 / +250							6100
 HBR1 R1AT Braided	-40 / +212		3250		2600	2300	1900	1500
 HBR2 R2AT Braided	-40 / +212		5800		4800	4000	3600	3100
 HHT2 Hi-Temp R2AT Braided	-40 / +300		5800		4800	4000		3100
 HBJK Jack Hose (static only)	-40 / +212		10000		10000			
 HBR4 R4 Suction & Return	-40 / +212							300



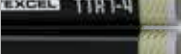
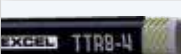
HYDRAULIC HOSE SUMMARY

	-16	-20	-24	-32	SAE	ISO	EN	MSHA	DOT	USCG	Other	Coupling
	3000				100R17	18572 BC		IC-188 / 5				F2
	3000				100R17	18572 BC		IC-188 / 4				F2
					100R19	18572 AC		IC-188 / 5				F2
						18572 BC		IC-188 / 5				F2
						18572 BC		IC-188 / 4				F2
						18572 BC (-6: AC)		IC-188 / 5				F2
				3100		18572 DC		IC-84 / 43				F4
	4100	4100	4100	4100	100R12	18572 DC	856R12	IC-188 / 5 (32: IC-84 / 43)				F4
	5100	5100	5100	5100	100R13	18572 DC (-24, -32: CC)	856R13	IC-188 / 5 (32: IC-84 / 43)				F4 F6 (-24, -32)
	5100				100R13	18572 DC	856R13	IC-188 / 4				F4
	6100	6100	6100		100R15	18572DC (-20, -24 CC)		IC-188 / 5				F4 F6 (20, 24)
	1300	900	725	580	100R1AT		853 1SN	IC-188 / 5 (32: IC-84 / 43)				F2 F4(-20 to 32)
	2400	1800	1300	1160	100R2AT		852 2SN	IC-188 / 5 (32: IC-84 / 43)				F2 F4(-20 to 32)
	2400				100R2AT	853 2SN		IC-188 / 1				F2 F4(-20 to 32)
								IC-188 / 5			IJ 100	F2
	245	200	145	100	100R4			IC-268				FS



HYDRAULIC HOSE SUMMARY

All Texcel hoses working pressures are based on dynamic working pressure with a 4:1 safety factor except For HBJK hoses

Hose Family	Temp Range °F	-2	-4	-5	-6	-8	-10	-12
 HBR5 R5 Braided (100R5 dimension)	-40 / +212		3000	3000	2250	2000	1750	1500
 HBHTR5 Hi-Temp R5 Braided (100R5 dimension)	-40 / +300		3000	3000	2250	2000	1750	1500
 TEX-PUSH-ON 300 Push On	-40 / +212		300		300	300	300	300
 BR14 100R14 Stainless steel Braided PTFE	-76 / +248		2540		1960	1740	1450	1310
 TR7 R7 Thermoplastic	-65 / +212	3300	3000		2500	2030		1300
 TTR7 R7 Twin Line Thermoplastic	-65 / +212		3000		2500	2030		
 TNCR7 R7 Non Conductive Thermoplastic	-40 / +212		3000		2500	2030		
 TTNCR7 R7 Non Conductive Twin Line Thermoplastic	-40 / +212		3000		2500	2030		
 TR8 R8 Thermoplastic	-40 / +212		5070		4060	3550		
 TTR8 R8 Twin Line Thermoplastic	-40 / +212		5070		4060	3550		
 TNCR8 R8 Non Conductive Thermoplastic	-40 / +212		5070		4060	3550		



HYDRAULIC HOSE SUMMARY

	-16	-20	-24	-32	SAE	ISO	EN	MSHA	DOT	USCG	Other	Coupling
	800	625	500	350	100R5				FMVSS106			F5
	800	625	500	350	100R5				FMVSS106			F5
	940				100R14							FT
					100R7	3949	855					FT
					100R7	3949	855					FT
					100R7	3949	855					FT
					100R7	3949	855					FT
					100R8	3949	855					FT
					100R8	3949	855					FT
					100R8	3949	855					FT



F2



HB3K TERA-GLIDE

3,000 PSI Braided Isobaric High Abrasion Resistant Hose

Medium pressure compact one or two braid high abrasion resistant hydraulic hose providing superior flexibility and significantly tighter minimum bend radius.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R17, ISO 18752 BC
Tube	Black, oil resistant synthetic rubber
Reinforcement	1 high tensile steel wire braid up to dash size 8 with 2 high tensile steel wire braid from dash size 10 and above
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
04	1/4	6	HB3K-4	0.48	12.3	3,000	210	12,000	840	1.97	50	0.12	0.18
06	3/8	10	HB3K-6	0.63	15.9	3,000	210	12,000	840	2.56	65	0.18	0.27
08	1/2	12	HB3K-8	0.75	19.1	3,000	210	12,000	840	3.54	90	0.26	0.38
10	5/8	16	HB3K-10	0.94	23.9	3,000	210	12,000	840	3.94	100	0.43	0.64
12	3/4	19	HB3K-12	1.10	28.0	3,000	210	12,000	840	4.72	120	0.54	0.80
16	1	25	HB3K-16	1.39	35.3	3,000	210	12,000	840	5.91	150	0.77	1.15

HB3KXT TERA-GLIDE XT

3,000 PSI Braided Isobaric Extreme Abrasion Resistant Hose

Medium pressure compact one or two braid extreme abrasion resistant hydraulic hose providing superior flexibility and a significantly tighter minimum bend radius.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R17, ISO 1875C BC
Tube	Black, oil resistant synthetic rubber
Reinforcement	1 high tensile steel wire braid up to dash size 8 with 2 high tensile steel wire braids from dash size 12 and above
Cover	TERA-GLIDE XT: Black, extreme abrasion resistant, synthetic rubber with UHMWPE. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES



I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
04	¼	6	HB3KXT-4	0.48	12.3	3,000	210	12,000	840	1.97	50	0.12	0.18
06	⅜	10	HB3KXT-6	0.63	15.9	3,000	210	12,000	840	2.56	65	0.18	0.27
08	½	12	HB3KXT-8	0.75	19.1	3,000	210	12,000	840	3.54	90	0.26	0.38
12	¾	19	HB3KXT-12	1.10	28.0	3,000	210	12,000	840	4.72	120	0.54	0.80
16	1	25	HB3KXT-16	1.39	35.3	3,000	210	12,000	840	5.91	150	0.77	1.15



F2



HB4K TERA-GLIDE

4,000 PSI Braided Isobaric High Abrasion Resistant Hose

High pressure compact two braid high abrasion resistant hydraulic hose providing superior flexibility and a significantly tighter minimum bend radius.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R19, ISO 18752 AC
Tube	Black, oil resistant synthetic rubber
Reinforcement	Two high tensile steel wire braids
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES

Dash	I.D.		# Part Number	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
6	3/8	10	HB4K-6	0.65	16.6	4,100	280	16,400	1,120	2.56	65	0.27	0.40
8	1/2	12	HB4K-8	0.80	20.3	4,100	280	16,400	1,120	3.54	90	0.40	0.60
10	5/8	16	HB4K-10	0.94	23.8	4,100	280	16,400	1,120	3.94	100	0.44	0.65
12	3/4	19	HB4K-12	1.09	27.8	4,100	280	16,400	1,120	4.72	120	0.54	0.80

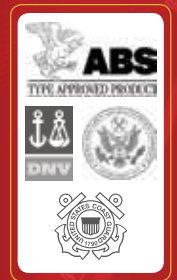
HB5K TERA-GLIDE

5,000 PSI Braided Isobaric High Abrasion Resistant Hose

Very high pressure compact two braid high abrasion resistant hydraulic hose providing superior flexibility and a significantly tighter minimum bend radius.



F2



TECHNICAL DATA

Specifications	Meets or Exceeds ISO 18752 BC
Tube	Black, oil resistant synthetic rubber
Reinforcement	Two high tensile steel wire braids
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES

													
I.D.			Part Number	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
04	¼	6	HB5K-4	0.52	13.2	5,100	350	20,400	1,400	1.77	45	0.20	0.30
06	⅜	10	HB5K-6	0.66	16.7	5,100	350	20,400	1,400	2.56	65	0.27	0.40
08	½	12	HB5K-8	0.79	20.1	5,100	350	20,400	1,400	3.54	90	0.37	0.55



HB5KXT TERA-GLIDE XT

5,000 PSI Braided Isobaric Extreme Abrasion Resistant Hose

Very high pressure compact two braid extreme abrasion resistant hydraulic hose providing superior flexibility and a significantly tighter minimum bend radius.



TECHNICAL DATA

Specifications	Meets or Exceeds ISO 18752 BC
Tube	Black, oil resistant synthetic rubber
Reinforcement	2 high tensile steel wire braids
Cover	TERA-GLIDE XT: Black, extreme abrasion resistant, synthetic rubber with UHMWPE. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV
Fittings	F2 SERIES

			# Part Number										
Dash	I.D. Inch	Dn		O.D. Inch	mm	Working Pressure		Burst Pressure		Bend Radius		Weight	
						psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
04	¼	6	HB5KXT-4	0.52	13.2	5,100	350	20,400	1,400	1.77	45	0.20	0.30
06	⅜	10	HB5KXT-6	0.66	16.7	5,100	350	20,400	1,400	2.56	65	0.27	0.40
08	½	12	HB5KXT-8	0.79	20.1	5,100	350	20,400	1,400	3.54	90	0.37	0.55

HB6K TERA-GLIDE

6,000 PSI Braided Isobaric High Abrasion Resistant Hose

Extremely high pressure compact two braid high abrasion resistant hydraulic hose providing superior flexibility and a significantly tighter minimum bend radius.



TECHNICAL DATA

Specifications	Meets or Exceeds ISO 18752 BC (-4) AC (-6)
Tube	Black, oil resistant synthetic rubber
Reinforcement	2 high tensile steel wire braids
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES



I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
04	1/4	6	HB6K-4	0.52	13.2	6,100	420	24,400	1,680	1.77	45	0.20	0.30
06	3/8	10	HB6K-6	0.65	16.5	6,100	420	24,400	1,680	2.76	70	0.26	0.38



F4



HS3K TERA-GLIDE

3,000 PSI Spiral Isobaric High Abrasion Resistant Hose

Medium pressure four spiral high abrasion resistant hydraulic hose provides superior flexibility.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R12 DC, ISO18752 DC
Tube	Black, oil resistant synthetic rubber
Reinforcement	4 high tensile steel wire spiral
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +250°F (-40°C to +121°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F4 SERIES

			#										
I.D.			Part Number	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
20	1 ¼"	32	HS3K-20	1.76	44.6	3,000	210	12,000	840	7.87	200	1.65	2.45
24	1 ½"	38	HS3K-24	2.03	51.6	3,000	210	12,000	840	9.84	250	2.02	3.00
32	2	51	HS3K-32	2.66	67.6	3,100	214	12,400	855	17.75	400	3.14	4.68

HS4K TERA-GLIDE

4,000 PSI Spiral Isobaric High Abrasion Resistant Hose

High pressure compact four spiral high abrasion resistance hydraulic hose. HS4K provides exceptional flexibility, rated to 1 million cycles at ½ minimum bend radius compared to SAE or DIN hoses.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R12, ISO 18752 DC
Tube	Black, oil resistant synthetic rubber
Reinforcement	4 high tensile steel wire spirals
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +250°F (-40°C to +121°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F4 SERIES

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
10	5/8	16	HS4K-10	1.04	26.3	4,100	280	16,400	1,120	4.00	100	0.64	0.95
12	3/4	19	HS4K-12	1.18	30.0	4,100	280	16,400	1,120	4.70	120	0.74	1.10
16	1	25	HS4K-16	1.46	37.0	4,100	280	16,400	1,120	5.90	150	0.94	1.40
20	1 1/4	31	HS4K-20	1.76	44.6	4,100	280	16,400	1,120	8.30	210	1.68	2.50
24	1 1/2	38	HS4K-24	2.03	51.6	4,100	280	16,400	1,120	11.40	290	2.08	3.10
32	1 1/4"	32	HS4K-32	2.62	66.5	4,100	280	16,400	1,120	15.75	400	3.24	4.82



HS5K TERA-GLIDE

5,000 PSI Spiral Isobaric High Abrasion Resistant Hose

Very high pressure compact four and six spiral high abrasion resistance hydraulic hose. HS5K provides exceptional flexibility, rated to 1 million cycles at ½ minimum bend radius compared to SAE or DIN hoses.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R13, ISO 18752 DC, CC (-24 and above)
Tube	Black, oil resistant synthetic rubber
Reinforcement	4 high tensile steel wire spirals up to -20 6 high tensile steel wire spirals -24 & 32
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +250°F (-40°C to +121°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F4 SERIES (-08 THRU -20) F6 SERIES (-24 & -32)

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
08	½	12	HS5K-08	0.90	22.8	5,500	380	22,000	1520	3.50	90	0.54	0.80
10	⅝	16	HS5K-10	1.04	26.4	5,500	380	22,000	1520	4.00	100	0.64	0.95
12	¾	19	HS5K-12	1.19	30.1	5,500	380	22,000	1520	4.70	120	0.81	1.20
16	1	25	HS5K-16	1.47	37.4	5,100	350	20,400	1400	5.90	150	1.21	1.80
20	1 ¼	31	HS5K-20	1.76	44.8	5,100	350	20,400	1400	11.00	280	1.61	2.40
24	1 ½	38	HS5K-24	2.23	57.3	5,100	350	20,400	1400	11.80	300	3.09	4.60
32	2	51	HS5K-32	2.83	72	5,100	350	20,400	1400	15.7	400	4.66	6.93

HS5KXT TERA-GLIDE XT

5,000 PSI Spiral Isobaric Extreme Abrasion Resistant Hose

Very high pressure compact four and six spiral extreme abrasion resistance hydraulic hose. HS5KXT provides exceptional flexibility, rated to 1 million cycles at ½ minimum bend radius compared to SAE or DIN hoses.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R13, ISO 18752 DC
Tube	Black, oil resistant synthetic rubber
Reinforcement	4 high tensile steel wire spirals
Cover	TERA-GLIDE XT: Black, extreme abrasion resistant, synthetic rubber with UHMWPE. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +250°F (-40°C to +121°C)
Industry Approvals	MSHA, ABS, DNV
Fittings	F4 SERIES

													
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
12	¾	19	HS5KXT-12	1.19	30.1	5,500	380	22,000	1,520	4.70	120	0.81	1.20
16	1	25	HS5KXT-16	1.47	37.4	5,100	350	20,400	1,400	5.90	150	1.21	1.80





HS6K TERA-GLIDE

6,000 PSI Spiral Isobaric High Abrasion Resistant Hose

Extremely high pressure compact four and six spiral high abrasion resistance hydraulic hose. HS6K provides exceptional flexibility, rated to 1 million impulse cycles for the first two sizes at ½ minimum bend radius compared to SAE or DIN hoses.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R15, ISO 18752 DC (-12, -16), CC (-20, -24)
Tube	Black, oil resistant synthetic rubber
Reinforcement	4 high tensile steel wire spirals up to -12 & -16 6 high tensile steel wire spirals -20 & 24
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +250°F (-40°C to +121°C)
Industry Approvals	MSHA, ABS, DNV
Fittings	F4 SERIES (-12, -16) F6 SERIES (-20, -24)

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
12	¾	19	HS6K-12	1.20	30.6	6,100	420	24,400	1,680	4.70	120	1.01	1.50
16	1	25	HS6K-16	1.49	37.8	6,100	420	24,400	1,680	5.90	150	1.34	2.00
20	1 ¼	31	HS6K-20	1.94	49.3	6,100	420	24,400	1,680	11.80	300	2.39	3.55
24	1 ½	38	HS6K-24	2.24	57.0	6,100	420	24,400	1,680	13.80	350	3.12	4.65

HBR1 TERA-GLIDE

R1AT Braided High Abrasion Resistant Hose

Medium pressure high abrasion resistant hose for hydraulic applications.



F2

F4



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R1AT, EN853 1SN
Tube	Black, oil resistant synthetic rubber
Reinforcement	1 high tensile steel wire braid
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES (-4, -6, -8, -10, -12, -16) F4 SERIES (-20, -24, -32)

	I.D.		Part Number	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	¼	06	HBR1-4	0.50	12.8	3,250	225	13,000	900	4.00	100	0.14	0.21
6	⅜	10	HBR1-6	0.67	16.9	2,600	180	10,400	720	4.92	125	0.22	0.32
8	½	12	HBR1-8	0.78	19.9	2,300	160	9,200	640	7.09	180	0.27	0.40
10	⅝	16	HBR1-10	0.91	23.1	1,900	130	7,600	520	8.07	205	0.31	0.46
12	¾	19	HBR1-12	1.07	27.1	1,500	105	6,000	420	9.45	240	0.38	0.57
16	1	25	HBR1-16	1.38	35.1	1,300	87	5,200	348	11.81	300	0.60	0.89
20	1¼	31	HBR1-20	1.67	42.5	900	62	3,600	248	17.72	450	0.80	1.19
24	1½	38	HBR1-24	1.96	49.8	725	50	2,900	200	19.69	500	1.08	1.61
32	2	51	HBR1-32	2.56	63.6	580	40	2,320	160	24.8	630	1.32	1.96



HBR2 TERA-GLIDE

R2AT Braided High Abrasion Resistant Hose

High pressure, high abrasion resistant hose for hydraulic applications.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R2AT, EN853 2SN
Tube	Black, oil resistant synthetic rubber
Reinforcement	2 high tensile steel wire braids
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES (-4, -6, -8, -10, -12, -16) F4 SERIES (-20, -24, -32)

	I.D.		Part Number	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	¼	06	HBR2-4	0.56	14.3	5,800	400	23,200	1,600	3.94	100	0.23	0.34
6	⅜	10	HBR2-6	0.72	18.4	4,800	330	19,200	1,320	4.92	125	0.33	0.50
8	½	12	HBR2-8	0.84	21.3	4,000	275	16,000	1,100	7.09	180	0.40	0.60
10	⅝	16	HBR2-10	0.97	24.7	3,600	250	14,400	1,000	8.07	205	0.49	0.73
12	¾	19	HBR2-12	1.13	28.6	3,100	215	12,400	860	9.45	240	0.58	0.87
16	1	25	HBR2-16	1.46	37.2	2,400	165	9,600	660	11.81	300	0.87	1.29
20	1¼	31	HBR2-20	1.84	46.7	1,800	125	7,200	500	16.54	420	1.33	1.97
24	1½	38	HBR2-24	2.11	53.7	1,300	90	5,200	360	19.69	500	1.58	2.36
32	2	51	HBR2-32	2.63	66.7	1,160	78	4,640	312	24.8	630	1.99	2.83

HHT2

Hi-Temp R2AT Braided Hose

Abrasion resistant hose for use in high temperature and high pressure hydraulic applications.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R2AT, EN853 2SN
Tube	Blue, oil resistant synthetic rubber
Reinforcement	2 high tensile steel wire braids
Cover	Blue, synthetic rubber resistant to oils, abrasion and weather condition
Temperature	-40°F to +300°F (-40°C to +135°C)
Industry Approvals	MSHA, ABS, DNV, USCG
Fittings	F2 SERIES

	I.D.		Part Number	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	06	HHT2-4	0.59	15.0	5,800	400	23,200	1,600	4	100	0.22	0.33
6	3/8	10	HHT2-6	0.75	19.0	4,800	330	19,200	1,320	5	130	0.35	0.52
8	1/2	12	HHT2-8	0.87	22.0	4,000	275	16,000	1100	7	180	0.43	0.64
12	3/4	19	HHT2-12	1.15	29.2	3,100	215	12,400	860	9.5	240	0.62	0.92
16	1	25	HHT2-16	1.48	37.6	2,400	165	9,600	660	12	300	0.92	1.37



F2



HBJK TERA-GLIDE

Jack Hose With High Abrasion Resistant Cover

High abrasion resistant hose for use with hydraulic jack applications with petroleum and water-base fluids.



TECHNICAL DATA

Specifications	Meets or Exceeds performance of the material handling Institution. IJ100
Tube	Black, oil resistant synthetic rubber
Reinforcement	2 high tensile steel wire braids
Cover	TERA-GLIDE: Black, high abrasion resistant, synthetic rubber. Resistant to oil, ozone and to UV rays.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA, ABS, DNV
Fittings	F2 SERIES

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	06	HBJK-4	0.52	13.3	10,000	700	20,000	1,400	1.97	50	0.23	0.34
6	3/8	10	HBJK-6	0.68	17.3	10,000	700	20,000	1,400	2.56	65	0.28	0.42

HBR4

R4 Low Pressure ½ MBR Suction/Return

Low pressure hydraulic return line or suction line for petroleum- and water-based hydraulic fluids.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R4
Tube	Black, Oil, fuel and heat resistant, NBR (ARPM Class A)
Reinforcement	High tensile tire cord plies with dual helix wires
Cover	Black, smooth with cloth impression, oil, abrasion, weather and ozone resistant.
Temperature	-40°F to +212°F (-40°C to +100°C)
Industry Approvals	MSHA,
Fittings	FS SERIES

	I.D.		Part Number		O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight
Dash	Inch	Dn		Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
12	¾	19	HBR4-12	1.26	32	300	21	1,200	83	2.17	55	0.47	0.70
16	1	25	HBR4-16	1.50	38	245	17	980	68	2.95	75	0.60	0.90
20	1 ¼	31	HBR4-20	1.77	45	200	14	800	55	3.35	85	0.96	1.44
24	1 ½	38	HBR4-24	2.05	52	150	10	600	41	3.74	95	1.13	1.70
32	2	51	HBR4-32	2.56	65	100	7	400	28	5.51	140	1.37	2.05



F5

HBR5

R5 Braided Hose

Medium pressure hydraulic hose used for petroleum based-oil lines.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R5
Tube	Black, oil resistant synthetic rubber
Reinforcement	1 textile braid and one high tensile steel braid
Cover	Black, oil resistant, polyester braid
Temperature	-40°F to +212°F (-40°C to +100°C)
Fittings	F5 SERIES

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	3/16	05	HBR5-4	0.52	13.2	3,000	210	12,000	840	2.99	76	0.17	0.25
5	1/4	06	HBR5-5	0.57	14.5	3,000	210	12,000	840	3.35	85	0.18	0.26
6	5/16	08	HBR5-6	0.67	17.1	2,250	155	9,000	620	3.94	100	0.22	0.35
8	13/32	10	HBR5-8	0.76	19.4	2,000	140	8,000	560	4.53	115	0.26	0.38
10	1/2	12	HBR5-10	0.92	23.4	1,750	122	7,000	488	5.51	140	0.36	0.53
12	5/8	16	HBR5-12	1.08	27.4	1,500	105	6,000	420	6.50	165	0.44	0.65
16	7/8	22	HBR5-16	1.23	31.3	800	55	3,200	220	7.28	185	0.44	0.66
20	1 1/8	28	HBR5-20	1.50	38.1	625	43	2,500	172	9.06	230	0.52	0.78
24	1 3/8	35	HBR5-24	1.75	44.4	500	35	2,000	140	10.43	265	0.57	0.85
32	1 13/16	46	HBR5-32	2.21	56.2	350	24	1,400	96	13.19	335	0.78	1.16

HBHTR5

Hi-Temp R5 Braided Hose

High temperature, medium pressure hydraulic hose use for petroleum-based oil lines.



F5



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R5
Tube	Black, oil resistant synthetic rubber
Reinforcement	1 textile braid and one high tensile steel braid
Cover	Blue, oil resistant, polyester braid
Temperature	-40°F to +300°F (-40°C to +150°C)
Fittings	F5 SERIES

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	3/16	05	HBHTR5-4	0.52	13.2	3,000	210	12,000	840	2.99	76	0.16	0.24
5	1/4	06	HBHTR5-5	0.57	14.5	3,000	210	12,000	840	3.35	85	0.17	0.26
6	5/16	08	HBHTR5-6	0.67	17.1	2,250	155	9,000	620	3.94	100	0.21	0.32
8	13/32	10	HBHTR5-8	0.76	19.4	2,000	140	8,000	560	4.53	115	0.24	0.36
10	1/2	12	HBHTR5-10	0.92	23.4	1,750	122	7,000	488	5.51	140	0.34	0.51
12	5/8	16	HBHTR5-12	1.08	27.4	1,500	105	6,000	420	6.50	165	0.43	0.63
16	7/8	22	HBHTR5-16	1.23	31.3	800	55	3,200	220	7.28	185	0.43	0.63
20	1 1/8	28	HBHTR5-20	1.50	38.1	625	43	2,500	172	9.06	230	0.50	0.75
24	1 3/8	35	HBHTR5-24	1.75	44.4	500	35	2,000	140	10.43	265	0.55	0.82
32	1 13/16	46	HBHTR5-32	2.21	56.2	350	24	1,400	96	13.19	335	0.76	1.14



TEX-PUSH-ON 300

300 PSI Push-On Hose

Low pressure braided hose for quick and easy insertion of push-on fittings with no special crimping tools required. Its internal polyester reinforcement design allows for excellent coupling retention.



TECHNICAL DATA

Tube	Black, NBR (ARPM Class A)
Cover	Black, NBR/PVC (ARPM Class A)
Reinforcement	Black, reinforced braided polyester cords
Safety Factor	4:1
Temperature	-40°F to +212°F (-40°C to +100°C)

 I.D.			#		 O.D.		 Working Pressure		 Burst Pressure		 Weight	
Dash	Inch	Dn	Part Number		Inch	mm	psi	bar	psi	bar	lbs/ft	Kg/mt
4	¼	6	PUSH-4-250		0.5	13	300	21	1200	83	0.10	0.15
6	⅜	10	PUSH-6-250		0.66	17	300	21	1200	83	0.14	0.20
8	½	12	PUSH-8-250		0.81	21	300	21	1200	83	0.19	0.28
10	⅝	16	PUSH-10-250		0.94	24	300	21	1200	83	0.22	0.33
12	¾	19	PUSH-12-250		1.09	28	300	21	1200	83	0.28	0.43

BR14

R14 Stainless Steel Braided PTFE Hose

High pressure and non-conductive PTFE tubing with 100R14 stainless steel outer braid for paints, oil, air, and water based fluids.



FT

TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R14
Tube	PTFE
Cover	Stainless steel outer braid
Temperature	-76°F to +248°F (-60°C to +120°C)
Fittings	FT SERIES

			#											
I.D.			Part Number		O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn			Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	¼	6	BR14-4		0.35	8.90	2,540	175	10,150	920	1.77	45	0.06	0.09
6	⅜	10	BR14-6		0.47	12.40	1,960	135	7,830	540	2.16	55	0.10	0.15
8	½	12	BR14-8		0.61	15.70	1,740	120	6,960	480	2.75	70	0.14	0.21
10	⅝	16	BR14-10		0.75	19.10	1,450	100	5,800	400	5.11	130	0.18	0.26
12	¾	19	BR14-12		0.87	22.20	1,310	90	5,220	360	7.48	190	0.22	0.32
16	1	25	BR14-16		1.15	29.30	940	65	3,770	260	10.62	270	0.31	0.45



TR7

R7 Thermoplastic Hose

Textile reinforced thermoplastic plastic hose meets or exceeds SAE 100R7 specifications.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R7, EN 855 ISO 3949
Tube	Polyester
Reinforcement	Polyester braid
Cover	Black antiabrasion polyurethane
Temperature	-65°F to +212°F (-54°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Industry Approvals LR	
Fittings	FT SERIES

			#											
I.D.			Part Number		O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn			Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
2	1/8	3	TR7-2		0.34	8.51	3,300	230	13,200	920	0.98	25	0.04	0.06
3	3/16	5	TR7-3		0.39	10.01	3,045	210	12,180	840	1.18	30	0.05	0.07
4	1/4	6	TR7-4		0.47	11.81	3,000	207	12,000	828	1.38	35	0.06	0.09
6	3/8	10	TR7-6		0.63	16.00	2,500	175	10,000	700	2.17	55	0.10	0.15
8	1/2	12	TR7-8		0.80	20.29	2,030	140	8,120	560	2.95	75	0.15	0.22
12	3/4	19	TR7-12		1.04	26.49	1,300	90	5,200	359	5.71	145	0.22	0.33

TTR7

R7 Twin Line Thermoplastic Hose

Textile reinforced thermoplastic plastic twin hose meets or exceeds SAE 100R7 specification.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R7, EN 855 ISO 3949
Tube	Polyester
Reinforcement	Polyester braid
Cover	Black antiabrasion polyurethane
Temperature	-65°F to +212°F (-54°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Fittings	FT SERIES

			#											
I.D.			Part Number		O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn			Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	6	TTR7-4		0.47	11.81	3,000	207	12,000	828	1.38	35	0.12	0.18
6	3/8	10	TTR7-6		0.63	16.00	2,500	175	10,000	700	2.17	55	0.21	0.31
8	1/2	12	TTR7-8		0.80	20.29	2,030	140	8,120	560	2.95	75	0.29	0.64



TNCR7

R7 Non Conductive Thermoplastic Hose

Textile-reinforced and non-conductive thermoplastic hose meets or exceeds SAE 100R7 specification.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R7, EN 855, ISO 3949, ANSI A92.2
Tube	Polyester
Reinforcement	Polyester Braid
Cover	Orange antiabrasion polyurethane
Temperature	-40°F to +212°F (-40°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Fittings	FT SERIES

			#										
I.D.				O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	¼	6	TNCR7-4	0.47	11.81	3,000	207	12,000	828	1.38	35	0.06	0.09
6	⅜	10	TNCR7-6	0.63	16.00	2,500	175	10,000	700	2.17	55	0.10	0.16
8	½	12	TNCR7-8	0.80	20.29	2,030	140	8,120	560	2.95	75	0.15	0.22

TTNCR7

R7 Non Conductive Twin Line Thermoplastic Hose

Textile-reinforced and non-conductive thermoplastic twin hoses meets or exceeds SAE 100R7 specification.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R7, EN 855, ISO 3949, ANSI A92.2
Tube	Polyester
Reinforcement	Polyester Braid
Cover	Orange antiabrasion polyurethane
Temperature	-40°F to +212°F (-40°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Fittings	FT SERIES

I.D.			#	O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn	Part Number	Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	6	TTNCR7-4	0.47	11.81	3,000	207	12,000	828	1.38	35	0.12	0.18
6	3/8	10	TTNCR7-6	0.63	16.00	2,500	172	10,000	700	2.17	55	0.20	0.31
8	1/2	12	TTNCR7-8	0.80	20.29	2,030	140	8,120	560	2.95	75	0.30	0.44



TR8

R8 Thermoplastic Hose

Textile-reinforced thermoplastic hose meets or exceeds SAE 100R8 specification.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R8, EN 855, ISO 3949
Tube	Polyester
Reinforcement	Textile braid
Cover	Black antiabrasion polyurethane
Temperature	-40°F to +212°F (-40°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Fittings	FT SERIES

 I.D.			# Part Number		 O.D.		 Working Pressure		 Burst Pressure		 Bend Radius		 Weight	
Dash	Inch	Dn			Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	6	TR8-4		0.47	11.81	5,075	350	20,300	1,400	1.97	50	0.07	0.10
6	3/8	10	TR8-6		0.63	16.00	4,060	280	16,240	1,120	2.76	70	0.10	0.15
8	1/2	12	TR8-8		0.80	20.29	3,550	245	14,200	980	3.74	95	0.15	0.23

TTR8

R8 Twin Line Thermoplastic Hose

Textile-reinforced thermoplastic twin hoses meets or exceeds SAE 100R8 specification.



TECHNICAL DATA

Specifications	Meets or Exceeds SAE 100R8, EN 855, ISO 3949
Tube	Polyester
Reinforcement	Textile braid
Cover	Black antiabrasion polyurethane
Temperature	-40°F to +212°F (-40°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Fittings	FT SERIES

			#											
I.D.			Part Number		O.D.		Working Pressure		Burst Pressure		Bend Radius		Weight	
Dash	Inch	Dn			Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	6	TTR8-4		0.47	11.81	5,075	350	20,300	1,400	1.97	50	0.13	0.19
6	3/8	10	TTR8-6		0.63	16.00	4,060	280	16,240	1,120	2.76	70	0.20	0.29
8	1/2	12	TTR8-8		0.80	20.29	3,550	245	14,200	980	3.74	95	0.30	0.44



TNCR8

R8 Non Conductive Thermoplastic Hose

Textile-reinforced and non-conductive thermoplastic hose meets or exceeds SAE 100R8 specification.



TECHNICAL DATA

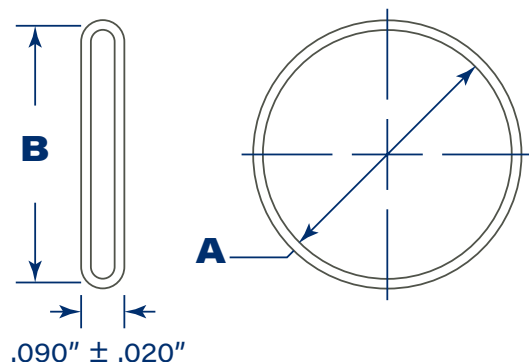
Specifications	Meets or Exceeds SAE 100R8, EN855 ISO 3949
Tube	Polyester
Reinforcement	Textile braid
Cover	Orange antiabrasion polyurethane
Temperature	-40°F to +212°F (-40°C to +100°C); 158°F (70°C) max for air, water and fluid contains water
Fittings	FT SERIES

 I.D.			# Part Number		 O.D.		 Working Pressure		 Burst Pressure		 Bend Radius		 Weight	
Dash	Inch	Dn			Inch	mm	psi	bar	psi	bar	inch	mm	lbs/ft	Kg/mt
4	1/4	6	TNCR8-4		0.47	11.81	5,075	350	20,300	1,400	1.97	50	0.08	0.06
6	3/8	10	TNCR8-6		0.63	16.00	4,060	280	16,240	1,120	2.76	70	0.10	0.15
8	1/2	12	TNCR8-8		0.80	20.29	3,550	245	14,200	980	3.74	95	0.15	0.22

HPNS

Nylon Hose Sleeve

Excellent abrasion resistance and UV protection, that meets MSHA requirement and provides limited burst protection.



TECHNICAL DATA

Materials	Nylon
Melting Point	+419°F - +430°F
Color	Black
Specification	MSHA: 171/1

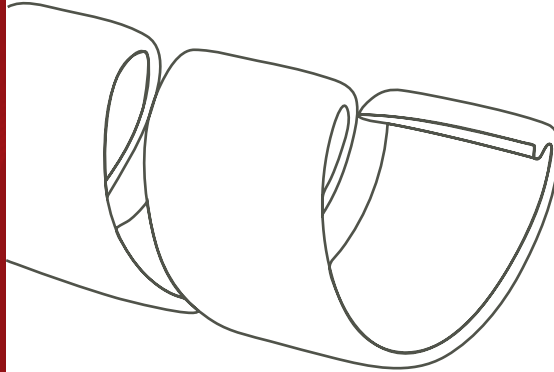
Part Number	Nominal ID "A"		Inside Flat Nominal ID "B"		Nominal wall thickness	
	Inch	mm	Inch	mm	Inch	mm
HPNS-4	0.92	23.4	1.45	36.83	0.09	2.29
HPNS-6	1.13	28.7	1.78	45.21	0.09	2.29
HPNS-8	1.33	33.8	2.10	53.21	0.09	2.29
HPNS-10	1.58	40.1	2.50	63.50	0.09	2.29
HPNS-12	1.78	45.2	2.81	71.37	0.09	2.29
HPNS-16	1.91	48.5	3.01	76.33	0.09	2.29
HPNS-20	2.54	64.5	4.00	101.60	0.09	2.29
HPNS-24	2.86	72.6	4.52	114.68	0.09	2.29
HPNS-32	3.34	84.8	5.25	133.35	0.09	2.29



HPPS

Plastic Spiral Guard

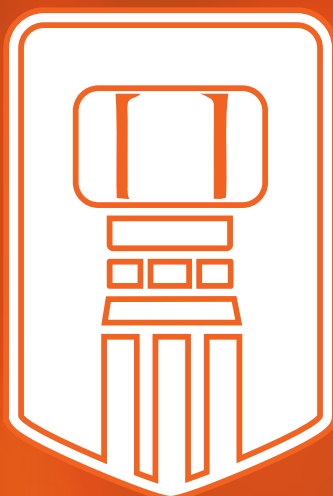
Protect your hydraulic hose assemblies with plastic spiral hose protectors. Everyday hydraulic hose operations can lead to constant exposure to chemicals, moisture, dirt, corrosion, high temperatures and extreme cover abrasion from equipment contact. The protective spiral wraps are produced from high grade HDPE that provides an extra barrier to abrasion, UV rays and surrounding elements. The spiral cover is easy to fit and helps to reduce the possibility of hose failure which leads to machine down time.



TECHNICAL DATA

Materials	Plastic
Melting Point	+60°F - +175°F
Color	Black

		#				
Recommend I.D.	I.D.	Part Number	O.D.	Coil Length		
Inch	Inch	mm	Inch	mm	Feet	
¼	0.5	12.7	HPPS-4	0.67	16.0	100
⅜	0.65	16.5	HPPS-6	0.75	20.0	100
½ and ⅝	0.8	20.3	HPPS-8	1.00	25.0	100
¾	1.1	27.9	HPPS-12	1.25	31.8	100
1 and 1 ¼	1.4	35.6	HPPS-16	1.50	40.0	100
1 ½	1.7	43.2	HPPS-24	2.00	50.0	100
2	2.2	55.9	HPPS-32	2.50	63.0	100



FITTINGS PRODUCTS

How To Read Part # 49

Terminology 50

Summary Pages 51

F2-PM 56

F2-PM-S 57

F2-PM-X 58

F2-PMS 59

F2-PMS90 60

F2-PF 61

F2-PFS 62

F2-JM 63

F2-JFS 64

F2-JFS-S 65

F2-JFS45M 66

F2-JFS90M 67

F2-JFS90M-S 68

F2-JFS90L 69

F2-SM 70

F2-SFS 71

F2-SFS90 72

F2-OM 73

F2-OFS 74

F2-OFS45M 75

F2-OFS90M 76

F2-OFS90L 77

F2-OBM 78

F2-OBMS 79

F2-OBMS90 80

F2-FL 81

F2-FL45 82

F2-FL90 83

F2-MIS 84

F2-MIS45 85

F2-MIS90 86

F2-BRF 87

F2-MFL 88

F2-JNR 89

F2-FG 90

F2-PWFS 91

F2-BPM 92

F2-BTM 93

F2-BFS 94

F2-BSPFS45 95

F2-BSPFS90 96

F2-BSPFS90-B 97

F2-DLM 98

F2-DLFS 99

F2-DLFS45 100

F2-DLFS90 101

F2-DHM 102

F2-DHFS 103

F2-DHFS45 104

F2-DHFS90 105

F2-JISS 106

F2-KFS 107

F2-KFS45 108

F2-KFS90 109

F5-PM 110

F5-JFS 111

F5-JFS90M 112

F5-SFS 113

F4-PM 114

F4-PM-S 115

F4-PM-X 116

F4-JM 117

F4-JFS 118

F4-JFS-S 119

F4-JFS45M 120

F4-JFS90M 121

F4-JFS90L 122

F4-OM 123

F4-OFS 124

F4-OFS45M 125

F4-OFS90M 126

F4-OFS90L 127

F4-OBM 128

F4-FL 129

F4-FL22.5 130

F4-FL30 131

F4-FL45 132

F4-FL60 133

F4-FL67.5 134

F4-FL90 135

F4-FL90L 136

F4-FLH 137

F4-FLH45 138

F4-FLH90 139

F4-FLH90L 140

F4-FLHC 141

F4-FLH45C 142

F4-FLH90C 143

F4-BRF 144

F4-BPM 145

F4-BTM 146

F4-BFS 147

F4-BSPFS45 148

F4-BSPFS90 149

F4-BSPFS90-B 150

F4-DLFS 151

F4-DHM 152

F4-DHFS 153

F4-DHFS45 154

F4-DHFS90 155

F4-KFS 156

F6-PM 157

F6-PM-X 158

F6-JFS 159

F6-JFS45M 160

F6-JFS90M 161

F6-FL 162

F6-FL45 163

F6-FL90 164

F6-FLH 165

F6-FLH45 166

F6-FLH90 167

F6-FLHC 168

F6-FLH45C 169

F6-FLH90C 170

F6-OFS 171

F6-OFS45M 172

F6-OFS90M 173

F6-BFS 174

F6-BPM 175

FT-PM 176

FT-PFS 177

FT-JFS 178

FT-JFS90M 179

FT-SFS 180

FT-BFS 181

FT-OFS 182

FT-OBM 183

FT-JISS 184

FT-OM 185

FS-FER 186

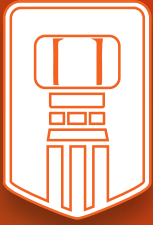
FS-PM 187

FS-JFS 188

FS-FL 189

FS-FL45 190

FS-FL90 191

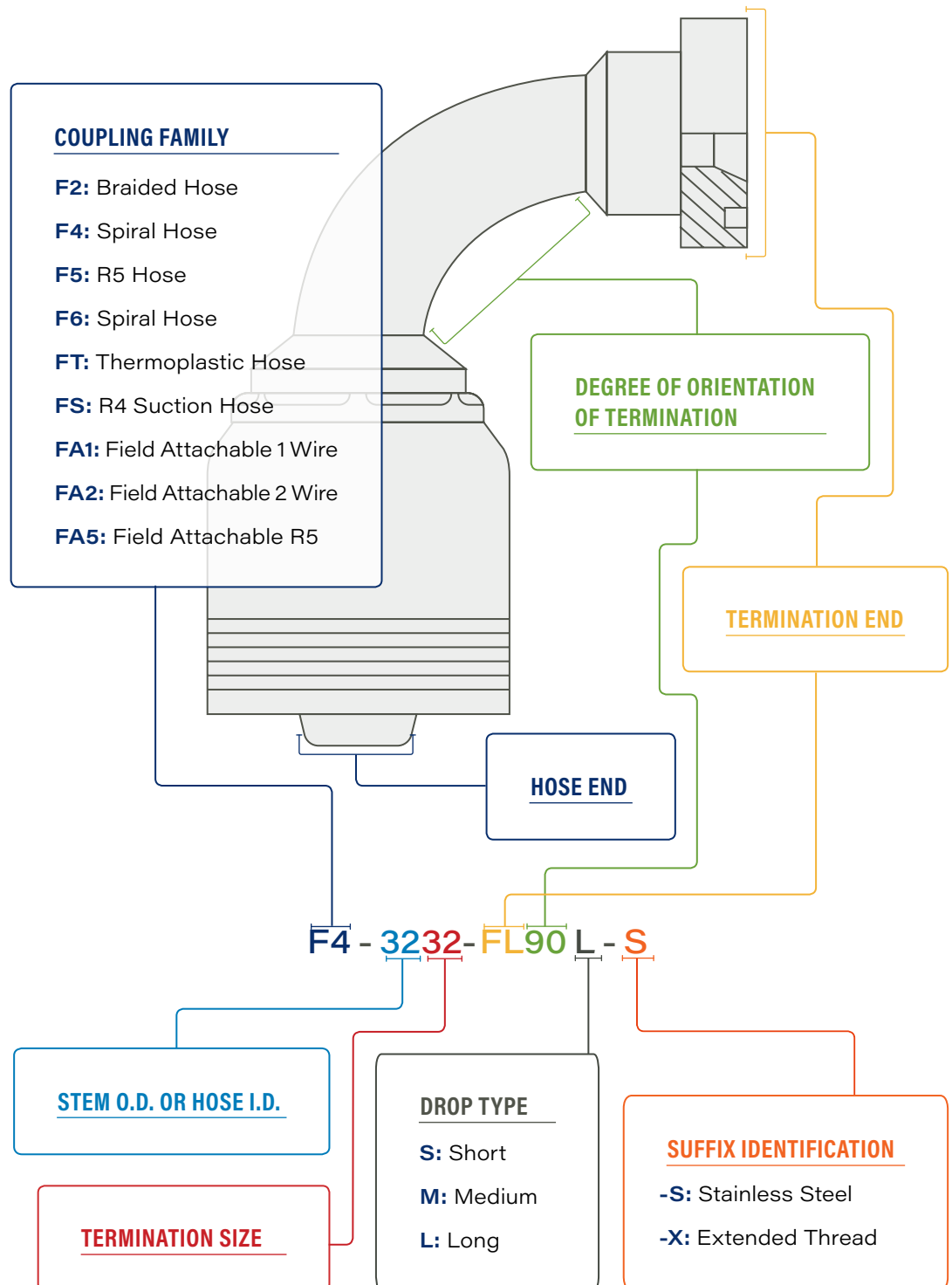


HOW TO READ FITTINGS PART NUMBERS

The pressure rating of a hydraulic hose assembly is not to exceed the working pressure of the lowest rated component in the hose assembly. Maximum working pressure includes the highest pressure the system will experience, such as spikes, surges and water hammer effects.

BENEFITS

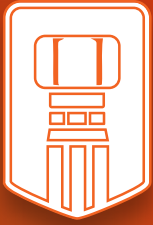
- No welds
- One-piece no-skive
- Machined for consistency
- Available in carbon and stainless steel
- Full manufacture tracing capability



PART NUMBER FAMILY	TERMINATION DESCRIPTION
BFS	BSPP FEMALE SWIVEL
BPM	BSPP MALE
BRF	BRAZE FEMALE SOLID
BSPFS45	BSPP FEMALE SWIVEL 45° BENT TUBE
BSPFS90	BSPP FEMALE SWIVEL 90° BENT TUBE
BTM	BSPT MALE
DHFS	DKOS FEMALE SWIVEL
DHFS45	DKOS FEMALE SWIVEL 45° BENT TUBE
DHFS90	DKOS FEMALE SWIVEL 90° BENT TUBE
DHM	DKS MALE
DLFS	DKOL FEMALE SWIVEL
DLFS45	DKOL FEMALE SWIVEL 45° BENT TUBE
DLFS90	DKOL FEMALE SWIVEL 90° BENT TUBE
FG	FEMALE SOLID GREASE LINE FITTING
FL	CODE 61 FLANGE
FL22.5	CODE 61 FLANGE 22.5° BEND
FL30	CODE 61 FLANGE 30° BEND
FL45	CODE 61 FLANGE 45° BEND
FL60	CODE 61 FLANGE 60° BEND
FL67.5	CODE 61 FLANGE 67.5° BEND
FL90	CODE 61 FLANGE 90° BEND
FL90L	CODE 61 FLANGE 90° LONG BEND
FLH	CODE 62 FLANGE
FLH45	CODE 62 FLANGE 45° BEND
FLH45C	CODE 62 CAT FLANGE 45° BEND
FLH90	CODE 62 FLANGE 90° BEND
FLH90L	CODE 62 FLANGE 90° LONG BEND
FLH90C	CODE 62 CAT FLANGE 90° BEND
FLHC	CODE 62 CAT FLANGE
JFS	JIC FEMALE SWIVEL
JFS-S	JIC FEMALE SWIVEL STAINLESS STEEL
JFS45M	JIC FEMALE SWIVEL 45° BENT TUBE MEDIUM DROP
JFS90L	JIC FEMALE SWIVEL 90° BENT TUBE LONG DROP
JFS90M	JIC FEMALE SWIVEL 90° BENT TUBE MEDIUM DROP

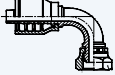
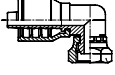


FITTINGS TERMINOLOGY



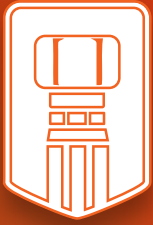
FITTINGS TERMINOLOGY

PART NUMBER FAMILY	TERMINATION DESCRIPTION
JFS90M-S	JIC FEMALE SWIVEL 90° BENT TUBE STAINLESS STEEL
JISS	JIS FEMALE SWIVEL 30° SEAT
JM	JIC MALE
JNR	JOINER
KFS	1.5 KOMATSU FEMALE SWIVEL 30° SEAT
KFS45	1.5 KOMATSU FEMALE SWIVEL 30° SEAT 45° BENT TUBE
KFS90	1.5 KOMATSU FEMALE SWIVEL 30° SEAT 90° BENT TUBE
MFL	MALE FLARELESS
MIS	MALE INVERTED SWIVEL
MIS45	MALE INVERTED SWIVEL 45° BENT TUBE
MIS90	MALE INVERTED SWIVEL 90° BENT TUBE
OBM	O-RING BOSS MALE
OBMS	O-RING BOSS MALE SWIVEL
OBMS90	O-RING BOSS MALE SWIVEL 90°
OFS	ORFS FEMALE SWIVEL
OFS45M	ORFS FEMALE SWIVEL 45° BENT TUBE MEDIUM DROP
OFS90L	ORFS FEMALE SWIVEL 90° BENT TUBE LONG DROP
OFS90M	ORFS FEMALE SWIVEL 90° BENT TUBE MEDIUM DROP
OM	ORFS MALE
PF	NPT SOLID FEMALE
PFS	NPSM FEMALE SWIVEL
PM	NPT MALE
PMS	NPT MALE SWIVEL
PM-S	NPT MALE STAINLESS STEEL
PMS90	NPT MALE SWIVEL 90° BEND
PM-X	NPT API MALE AND EXTENDED
PWFS	PRESSURE WASHER FEMALE SWIVEL
SFS	SAE FEMALE SWIVEL
SFS90	SAE FEMALE SWIVEL 90° BENT TUBE MEDIUM DROP
SM	SAE MALE

Termination		PAGE NUMBERS						
		F2	F4	F5	F6	FA	FT	FS
	Braze On Female	✓	✓					
	BSP Female Swivel	✓	✓		✓		✓	
	BSP Female Swivel 45° Bent Tube	✓	✓					
	BSP Female Swivel 90° Bent Tube	✓	✓					
	BSP Female Swivel 90° Bent Tube - Block Style	✓	✓					
	BSP Parallel Male	✓	✓		✓			
	BSP Taper Male	✓	✓					
	Code 61 Flange	✓	✓		✓			✓
	Code 61 Flange 22.5° Bend		✓					
	Code 61 Flange 30° Bend		✓					
	Code 61 Flange 45° Bend	✓	✓		✓			
	Code 61 Flange 60° Bend		✓					
	Code 61 Flange 67.5° Bend		✓					
	Code 61 Flange 90° Bend	✓	✓		✓			✓
	Code 61 Flange 90° Long Bend		✓					
	Code 61 Komatsu Flange	✓						
	Code 61 Komatsu Flange 90° Bend	✓						
	Code 62 CAT Flange		✓		✓			
	Code 62 CAT Flange 45° Bend		✓		✓			



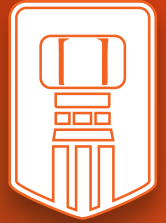
FITTINGS SUMMARY PAGES



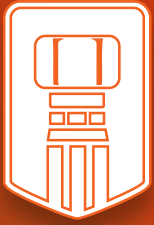
FITTINGS SUMMARY PAGES

Termination		PAGE NUMBERS						
		F2	F4	F5	F6	FA	FT	FS
	Code 62 CAT Flange 90° Bend		✓		✓			
	Code 62 Flange		✓		✓			
	Code 62 Flange 45° Bend		✓		✓			
	Code 62 Flange 90° Bend		✓		✓			
	Code 62 Flange 90° Bend Long Drop		✓					
	Flareless Male	✓						
	Female Solid Grease Line Fitting	✓						
	Inverted Swivel Male	✓						
	Inverted Swivel Male 45° Bent Tube	✓						
	Inverted Swivel Male 90° Bent Tube	✓						
	Japanese Industrial Female Swivel	✓					✓	
	Japanese Komatsu Female Swivel	✓	✓		✓			
	Japanese Komatsu Female Swivel 45° Bent Tube	✓						
	Japanese Komatsu Female Swivel 90° Bent Tube	✓						
	JIC Female Swivel	✓	✓	✓	✓		✓	
	JIC Female Swivel 45° Bent Tube	✓	✓		✓			
	JIC Female Swivel 90° Bent Tube	✓	✓	✓	✓		✓	
	JIC Female Swivel 90° Bent Tube Long Drop	✓	✓					
	JIC Female Swivel 90° Bent Tube Stainless Steel	✓						

Termination		PAGE NUMBERS						
		F2	F4	F5	F6	FA	FT	FS
	JIC Female Swivel Stainless Steel	✓	✓					
	JIC Male	✓	✓					
	Joiner	✓						
	Metric DIN Heavy Female O-Ring Swivel	✓	✓					
	Metric DIN Heavy Female O-Ring Swivel 45° Bent Tube	✓	✓					
	Metric DIN Heavy Female O-Ring Swivel 90° Bent Tube	✓	✓					
	Metric DIN Heavy Male	✓	✓					
	Metric DIN Light Female O-Ring Swivel	✓	✓					
	Metric DIN Light Female O-Ring Swivel 45° Bent Tube	✓						
	Metric DIN Light Female O-Ring Swivel 90° Bent Tube	✓						
	Metric DIN Light Male	✓						
	NPSM Female Pipe Swivel	✓					✓	
	NPTF Female Pipe	✓						
	NPTF Male Pipe	✓	✓	✓	✓		✓	✓
	NPTF Male Pipe API And Extended Thread	✓	✓		✓			
	NPTF Male Pipe Stainless Steel	✓	✓					
	NPTF Male Pipe Swivel	✓						
	NPTF Male Pipe Swivel 90° Bend	✓						
	ORFS Female Swivel	✓	✓		✓		✓	



FITTINGS SUMMARY PAGES

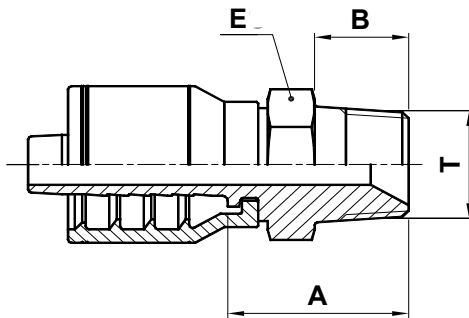


FITTINGS SUMMARY PAGES

Termination		PAGE NUMBERS						
		F2	F4	F5	F6	FA	FT	FS
	ORFS Female Swivel 45° Bent Tube	✓	✓		✓			
	ORFS Female Swivel 90° Bent Tube	✓	✓		✓			
	ORFS Female Swivel 90° Bent Tube Long Drop	✓	✓					
	ORFS Male	✓	✓				✓	
	O-Ring Boss Male	✓	✓				✓	
	O-Ring Boss Male Swivel	✓						
	O-Ring Boss Male Swivel 90° Bend	✓						
	Pressure Washer Female Swivel	✓						
	SAE Female Swivel	✓		✓			✓	
	SAE Female Swivel 90° Bent Tube	✓						
	SAE Male	✓						

F2-PM

NPT Male

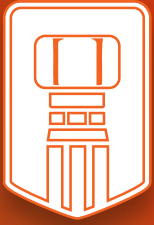


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

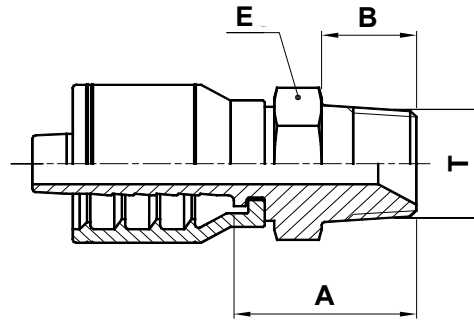
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0402-PM	04	¼	6	⅛" - 27	0.87	22	0.37	9.5	0.55	⅜	14
F2-0404-PM	04	¼	6	¼" - 18	1.04	26.5	0.55	14	0.55	⅜	14
F2-0406-PM	04	¼	6	⅜" - 18	1.10	28	0.55	14	0.75	¾	19
F2-0408-PM	04	¼	6	½" - 14	1.30	33	0.75	19	0.87	⅞	22
F2-0604-PM	06	⅜	10	¼" - 18	1.04	26.5	0.55	14	0.67	11/16	17
F2-0606-PM	06	⅜	10	⅜" - 18	1.10	28	0.55	14	0.75	¾	19
F2-0608-PM	06	⅜	10	½" - 14	1.30	33	0.75	19	0.87	⅞	22
F2-0806-PM	08	½	12	⅜" - 18	1.12	28.5	0.55	14	0.75	¾	19
F2-0808-PM	08	½	12	½" - 14	1.32	33.5	0.75	19	0.87	⅞	22
F2-0812-PM	08	½	12	¾" - 14	1.34	34	0.75	19	1.06	1 1/16	27
F2-1008-PM	10	⅝	16	½" - 14	1.32	33.5	0.75	19	0.95	15/16	24
F2-1012-PM	10	⅝	16	¾" - 14	1.61	41	0.75	19	1.06	1 1/16	27
F2-1208-PM	12	¾	19	½" - 14	1.36	34.5	0.75	19	1.06	1 1/16	27
F2-1212-PM	12	¾	19	¾" - 14	1.63	41.5	0.75	19	1.06	1 1/16	27
F2-1216-PM	12	¾	19	1" - 11 ½	1.83	46.5	0.94	24	1.42	1 7/16	36
F2-1612-PM	16	1	25	¾" - 14	1.69	43	0.75	19	1.26	1 ¼	32
F2-1616-PM	16	1	25	1" - 11 ½	1.89	48	0.94	24	1.42	1 7/16	36
F2-1620-PM	16	1	25	1 ¼" - 11 ½	2.36	60	0.96	24.5	1.81	1 13/16	46



F2-PM-S

NPT Male Stainless Steel



USE WITH TEXCEL HOSE SERIES

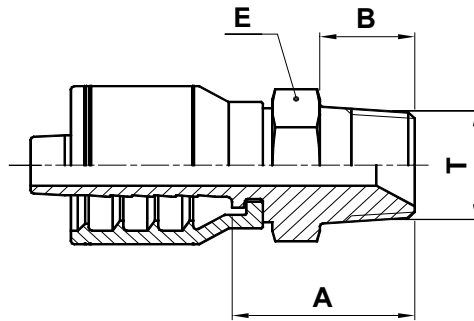
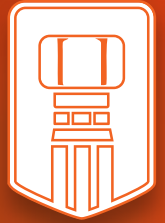
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	↻ [in]	[mm]
F2-0404-PM-S	04	¼	6	¼" - 18	1.04	26.5	0.55	14	0.55	9/16	14
F2-0606-PM-S	06	⅜	10	⅜" - 18	1.10	28	0.55	14	0.75	¾	19
F2-0808-PM-S	08	½	12	½" - 14	1.32	33.5	0.75	19	0.87	7/8	22
F2-1212-PM-S	12	¾	19	¾" - 14	1.63	41.5	0.75	19	1.06	1 1/16	27
F2-1616-PM-S	16	1	25	1" - 11 ½	1.89	48	0.94	24	1.42	1 7/16	36

F2-PM-X

NPT Male Extended Thread Size

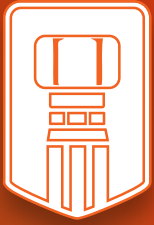


USE WITH TEXCEL HOSE SERIES

HBJK

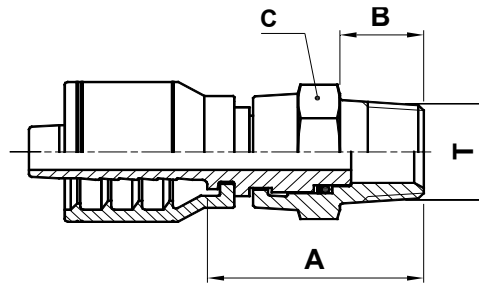
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0406-PM-X	04	1/4	6	3/8" - 18	1.42	36	0.87	22	0.75	3/4	19
F2-0606-PM-X	06	3/8	10	3/8" - 18	1.44	36.5	0.87	22	0.75	3/4	19



F2-PMS

NPT Male Swivel



USE WITH TEXCEL HOSE SERIES

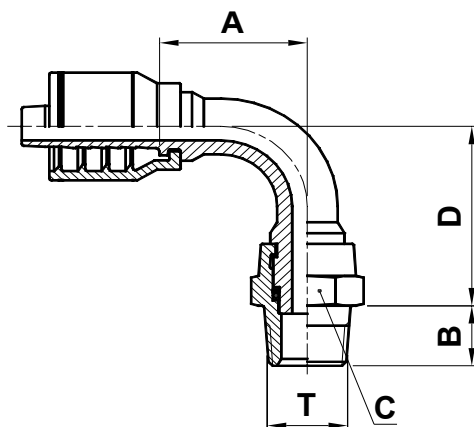
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		C		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0402-PMS	04	1/4	6	1/8" - 27	1.44	36.5	0.37	9.5	0.67	1 1/16	17
F2-0404-PMS	04	1/4	6	1/4" - 18	1.44	36.5	0.55	14	0.67	1 1/16	17
F2-0406-PMS	04	1/4	6	3/8" - 18	1.65	41.8	0.55	14	0.87	7/8	22
F2-0604-PMS	06	3/8	10	1/4" - 18	1.32	33.5	0.55	14	0.67	1 1/16	17
F2-0606-PMS	06	3/8	10	3/8" - 18	1.65	41.8	0.55	14	0.87	7/8	22
F2-0608-PMS	06	3/8	10	1/2" - 14	1.63	41.5	0.75	19	1.06	1 1/16	27
F2-0806-PMS	08	1/2	12	3/8" - 18	1.67	42.3	0.55	14	0.87	7/8	22
F2-0808-PMS	08	1/2	12	1/2" - 14	1.65	42	0.75	19	1.06	1 1/16	27
F2-1212-PMS	12	3/4	19	3/4" - 14	2.17	55	0.76	19.4	1.42	1 7/16	36
F2-1616-PMS	16	1	25	1" - 11 1/2	2.46	62.5	0.95	24.2	1.50	1 1/2	38

F2-PMS90

NPT Male Swivel 90° Bend

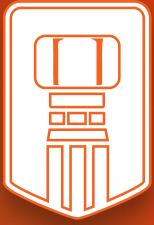


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

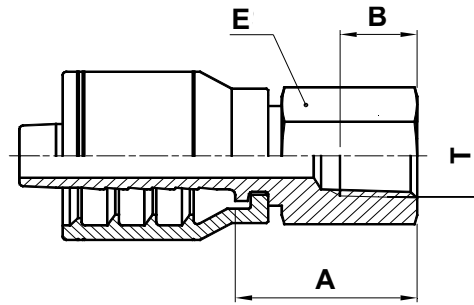
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-PMS90	04	1/4	6	1/4" - 18	1.10	28	0.55	14	1.46	37	0.67	1 1/16	17
F2-0606-PMS90	06	3/8	10	3/8" - 18	1.36	34.5	0.56	14.3	1.76	44.7	0.87	7/8	22
F2-0808-PMS90	08	1/2	12	1/2" - 14	1.75	44.5	0.75	19	2.34	59.5	1.06	1 1/16	27
F2-1212-PMS90	12	3/4	19	3/4" - 14	2.42	61.5	0.76	19.4	3.60	91.4	1.42	1 7/16	36



F2-PF

NPT Solid Female



USE WITH TEXCEL HOSE SERIES

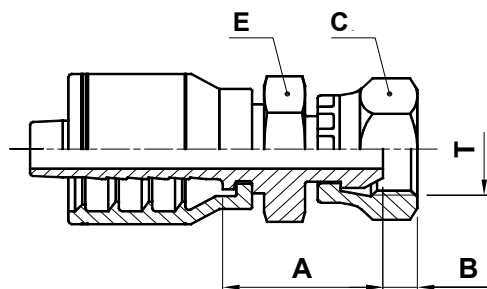
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-PF	04	1/4	6	1/4" - 18	1.04	26.5	0.47	11.9	0.75	3/4	19
F2-0406-PF	04	1/4	6	3/8" - 18	1.10	28	0.50	12.7	0.87	7/8	22
F2-0606-PF	06	3/8	10	3/8" - 18	1.10	28	0.50	12.7	0.87	7/8	22
F2-0608-PF	06	3/8	10	1/2" - 14	1.30	33	0.66	16.8	1.06	1 1/16	27
F2-0808-PF	08	1/2	12	1/2" - 14	1.32	33.5	0.67	17	1.06	1 1/16	27
F2-1212-PF	12	3/4	19	3/4" - 14	1.40	35.5	0.66	16.8	1.26	1 1/4	32

F2-PFS

NPSM Female Swivel

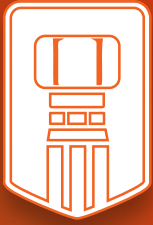


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

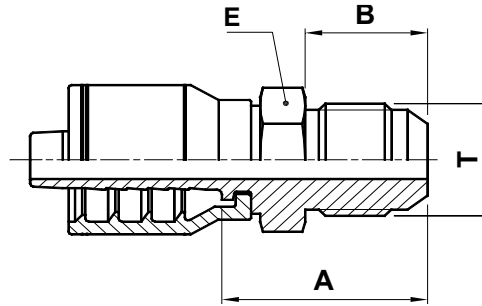
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]
F2-0404-PFS	04	¼	6	¼" - 18	0.94	24	0.17	4.2	0.75	¾	19
F2-0606-PFS	06	⅜	10	⅜" - 18	1.04	26.5	0.22	5.7	0.87	⅞	22
F2-0608-PFS	06	⅜	10	½" - 14	1.12	28.5	0.27	6.9	0.87	⅞	22
F2-0808-PFS	08	½	12	½" - 14	1.14	29	0.27	6.9	0.87	⅞	22
F2-1212-PFS	12	¾	19	¾" - 14	1.45	36.8	0.34	8.7	1.06	1 ⅛	27
F2-1616-PFS	16	1	25	1" - 11 ½	1.59	40.5	0.41	10.5	1.26	1 ¼	32



F2-JM

JIC Male



USE WITH TEXCEL HOSE SERIES

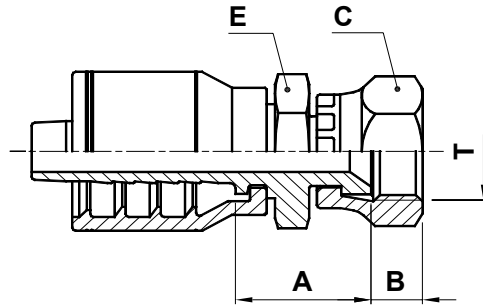
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-JM	04	1/4	6	7/16" - 20	1.04	26.5	0.55	14	0.55	9/16	14
F2-0405-JM	04	1/4	6	1/2" - 20	1.04	26.5	0.55	14	0.55	9/16	14
F2-0406-JM	04	1/4	6	9/16" - 18	1.08	27.5	0.55	14	0.67	11/16	17
F2-0606-JM	06	3/8	10	9/16" - 18	1.08	27.5	0.56	14.1	0.67	11/16	17
F2-0608-JM	06	3/8	10	3/4" - 16	1.19	30.2	0.66	16.7	0.75	3/4	19
F2-0610-JM	06	3/8	10	7/8" - 14	1.37	34.8	0.76	19.3	0.95	15/16	24
F2-0808-JM	08	1/2	12	3/4" - 16	1.21	30.7	0.66	16.7	0.75	3/4	19
F2-0810-JM	08	1/2	12	7/8" - 14	1.38	35	0.76	19.3	0.95	15/16	24
F2-0812-JM	08	1/2	12	1 1/16" - 12	1.54	39	0.86	21.9	1.06	1 1/16	27
F2-1010-JM	10	5/8	16	7/8" - 14	1.39	35.3	0.76	19.3	0.95	15/16	24
F2-1012-JM	10	5/8	16	1 1/16" - 12	1.53	38.9	0.86	21.9	1.06	1 1/16	27
F2-1212-JM	12	3/4	19	1 1/16" - 12	1.55	39.4	0.86	21.9	1.06	1 1/16	27
F2-1214-JM	12	3/4	19	1 3/16" - 12	1.58	40.1	0.89	22.6	1.26	1 1/4	32
F2-1216-JM	12	3/4	19	1 5/16" - 12	1.80	45.6	0.91	23.1	1.42	1 7/16	36
F2-1616-JM	16	1	25	1 5/16" - 12	1.85	47.1	0.91	23.1	1.42	1 7/16	36
F2-1620-JM	16	1	25	1 5/8" - 12	2.31	58.8	0.96	24.3	1.81	1 13/16	46

F2-JFS

JIC Female Swivel

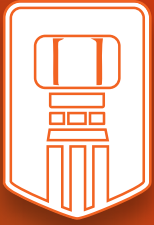


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

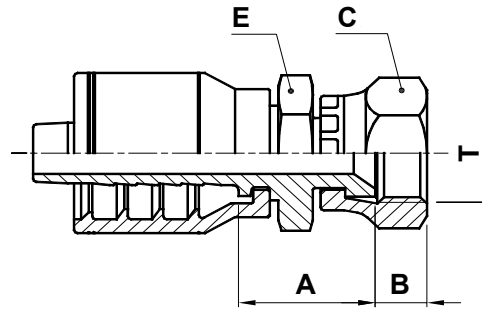
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C				
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]	[in]	[in]	[mm]
F2-0404-JFS	04	¼	6	7/16" - 20	0.82	20.8	0.34	8.7	0.55	9/16	14	0.55	9/16	14
F2-0405-JFS	04	¼	6	½" - 20	0.85	21.5	0.37	9.5	0.55	9/16	14	0.67	11/16	17
F2-0406-JFS	04	¼	6	9/16" - 18	0.91	23	0.37	9.5	0.55	9/16	14	0.75	¾	19
F2-0408-JFS	04	¼	6	¾" - 16	0.73	18.5	0.41	10.3	-	-	-	0.87	7/8	22
F2-0604-JFS	06	⅜	10	7/16" - 20	0.87	22	0.34	8.7	0.67	11/16	17	0.55	9/16	14
F2-0606-JFS	06	⅜	10	9/16" - 18	0.91	23	0.37	9.5	0.67	11/16	17	0.75	¾	19
F2-0608-JFS	06	⅜	10	¾" - 16	1.02	26	0.42	10.7	0.75	¾	19	0.87	7/8	22
F2-0610-JFS	06	⅜	10	7/8" - 14	1.12	28.5	0.50	12.7	0.87	7/8	22	1.06	1 1/16	27
F2-0806-JFS	08	½	12	9/16" - 18	1.00	25.5	0.37	9.5	0.75	¾	19	0.75	¾	19
F2-0808-JFS	08	½	12	¾" - 16	1.04	26.5	0.42	10.7	0.75	¾	19	0.87	7/8	22
F2-0810-JFS	08	½	12	7/8" - 14	1.12	28.5	0.50	12.7	0.87	7/8	22	1.06	1 1/16	27
F2-0812-JFS	08	½	12	1 1/16" - 12	1.34	34	0.56	14.3	1.06	1 1/16	27	1.26	1 ¼	32
F2-1008-JFS	10	5/8	16	¾" - 16	1.08	27.4	0.42	10.7	0.87	7/8	22	0.87	7/8	22
F2-1010-JFS	10	5/8	16	7/8" - 14	1.17	29.8	0.50	12.7	0.87	7/8	22	1.06	1 1/16	27
F2-1012-JFS	10	5/8	16	1 1/16" - 12	1.34	34	0.56	14.3	1.06	1 1/16	27	1.26	1 ¼	32
F2-1210-JFS	12	¾	19	7/8" - 14	1.43	36.3	0.50	12.7	1.06	1 1/16	27	1.06	1 1/16	27
F2-1212-JFS	12	¾	19	1 1/16" - 12	1.36	34.5	0.56	14.3	1.06	1 1/16	27	1.26	1 ¼	32
F2-1214-JFS	12	¾	19	1 3/16" - 12	1.22	31	0.57	14.5	1.18	1 3/16	30	1.42	1 7/16	36
F2-1216-JFS	12	¾	19	1 5/16" - 12	1.42	36	0.63	16	1.26	1 ¼	32	1.50	1 ½	38
F2-1612-JFS	16	1	25	1 1/16" - 12	1.50	38	0.56	14.3	1.26	1 ¼	32	1.26	1 ¼	32
F2-1616-JFS	16	1	25	1 5/16" - 12	1.40	35.5	0.63	16	1.26	1 ¼	32	1.50	1 ½	38
F2-1620-JFS	16	1	25	1 5/8" - 12	1.18	30	0.63	16	--	--	--	1.97	2	50



F2-JFS-S

JIC Female Swivel Stainless Steel



USE WITH TEXCEL HOSE SERIES

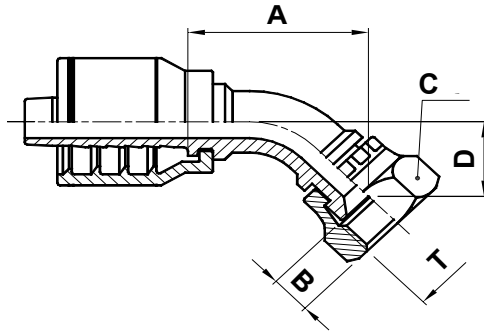
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E			C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
F2-0404-JFS-S	04	¼	6	7⁄16" - 20	0.82	20.8	0.34	8.7	0.55	9⁄16	14	0.55	9⁄16	14
F2-0606-JFS-S	06	⅜	10	9⁄16" - 18	0.91	23	0.37	9.5	0.67	11⁄16	17	0.75	¾	19
F2-0808-JFS-S	08	½	12	¾" - 16	1.04	26.5	0.42	10.7	0.75	¾	19	0.87	7⁄8	22
F2-1212-JFS-S	12	¾	19	1 1⁄16" - 12	1.36	34.5	0.56	14.3	1.06	1 1⁄16	27	1.26	1 ¼	32
F2-1616-JFS-S	16	1	25	1 5⁄16" - 12	1.57	40	0.59	15.1	1.26	1 ¼	32	1.50	1 ½	38

F2-JFS45M

JIC Female Swivel 45° Bent Tube Medium Drop

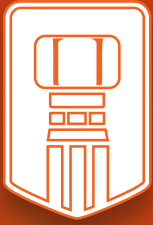


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

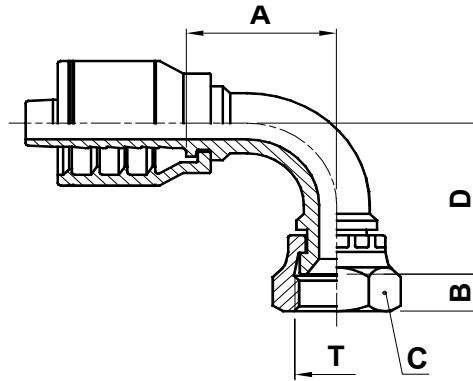
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-JFS45M	04	¼	6	7/16" - 20	1.26	32	0.34	8.7	0.52	13.2	0.55	9/16	14
F2-0405-JFS45M	04	¼	6	½" - 20	1.36	34.5	0.41	10.5	0.58	14.8	0.67	11/16	17
F2-0406-JFS45M	04	¼	6	9/16" - 18	1.30	33.1	0.37	9.5	0.53	13.4	0.75	¾	19
F2-0606-JFS45M	06	⅜	10	9/16" - 18	1.33	33.9	0.37	9.5	0.48	12.1	0.75	¾	19
F2-0608-JFS45M	06	⅜	10	¾" - 16	1.67	42.5	0.42	10.7	0.59	15	0.87	7/8	22
F2-0808-JFS45M	08	½	12	¾" - 16	1.60	40.7	0.42	10.7	0.54	13.8	0.87	7/8	22
F2-0810-JFS45M	08	½	12	7/8" - 14	1.91	48.5	0.49	12.5	0.83	21.2	1.06	1 1/16	27
F2-1010-JFS45M	10	5/8	16	7/8" - 14	2.42	61.5	0.50	12.7	0.97	24.8	1.06	1 1/16	27
F2-1012-JFS45M	10	5/8	16	1 1/16" - 12	2.52	64	0.56	14.3	1.04	26.5	1.26	1 ¼	32
F2-1212-JFS45M	12	¾	19	1 1/16" - 12	2.66	67.4	0.56	14.3	1.06	26.9	1.26	1 ¼	32
F2-1216-JFS45M	12	¾	19	1 5/16" - 12	2.75	69.9	0.63	16	1.20	30.4	1.50	1 ½	38
F2-1616-JFS45M	16	1	25	1 5/16" - 12	3.31	84	0.63	16	1.26	32	1.50	1 ½	38



F2-JFS90M

JIC Female Swivel 90° Bent Tube Medium Drop



USE WITH TEXCEL HOSE SERIES

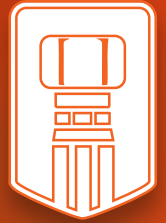
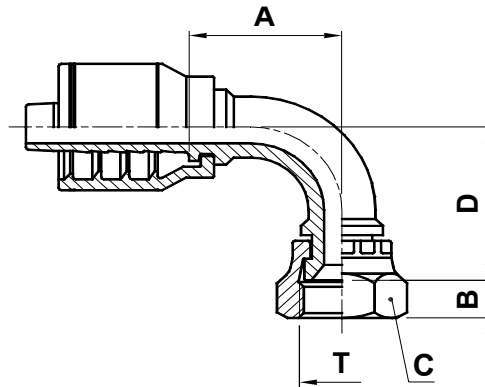
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-JFS90M	04	¼	6	7/16" - 20	1.00	25.3	0.34	8.7	0.96	24.5	0.55	9/16	14
F2-0405-JFS90M	04	¼	6	½" - 20	1.14	29	0.37	9.5	1.18	30	0.67	11/16	17
F2-0406-JFS90M	04	¼	6	9/16" - 18	1.12	28.5	0.37	9.5	1.10	28	0.75	¾	19
F2-0606-JFS90M	06	⅜	10	9/16" - 18	1.09	27.8	0.37	9.5	0.91	23	0.75	¾	19
F2-0608-JFS90M	06	⅜	10	¾" - 16	1.38	35	0.42	10.7	1.18	30	0.87	7/8	22
F2-0808-JFS90M	08	½	12	¾" - 16	1.56	39.5	0.42	10.7	1.18	30	0.87	7/8	22
F2-0810-JFS90M	08	½	12	7/8" - 14	1.45	36.8	0.49	12.5	1.59	40.5	1.06	1 1/16	27
F2-1008-JFS90M	10	5/8	16	¾" - 16	1.99	50.5	0.42	10.7	1.85	47	0.87	7/8	22
F2-1010-JFS90M	10	5/8	16	7/8" - 14	2.13	54	0.50	12.7	2.05	52	1.06	1 1/16	27
F2-1012-JFS90M	10	5/8	16	1 1/16" - 12	2.13	54	0.56	14.3	2.17	55	1.26	1 ¼	32
F2-1210-JFS90M	12	¾	19	7/8" - 14	2.13	54.2	0.50	12.7	2.17	55	1.06	1 1/16	27
F2-1212-JFS90M	12	¾	19	1 1/16" - 12	2.19	55.5	0.54	13.8	2.17	55	1.26	1 ¼	32
F2-1216-JFS90M	12	¾	19	1 5/16" - 12	2.19	55.5	0.63	16	2.40	61	1.50	1 ½	38
F2-1616-JFS90M	16	1	25	1 5/16" - 12	2.83	72	0.63	16	2.80	71	1.50	1 ½	38
F2-1620-JFS90M	16	1	25	1 5/8" - 12	3.13	79.5	0.63	16	3.13	79.5	1.97	2	50

F2-JFS90M-S

JIC Female Swivel 90° Bent Tube Stainless Steel

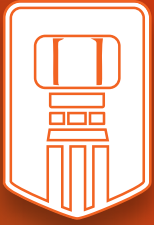


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

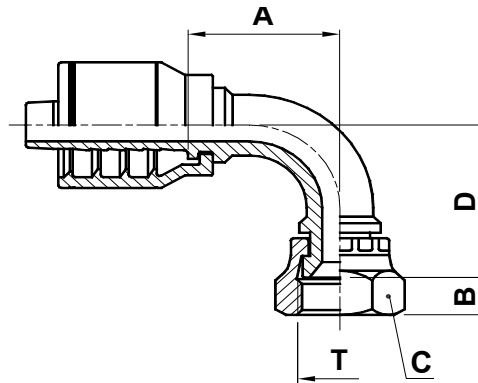
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-JFS90M-S	04	1/4	6	7/16" - 20	1.00	25.3	0.34	8.7	0.96	24.5	0.55	9/16	14
F2-0606-JFS90M-S	06	3/8	10	9/16" - 18	1.09	27.8	0.37	9.5	0.91	23	0.75	3/4	19
F2-0808-JFS90M-S	08	1/2	12	3/4" - 16	1.56	39.5	0.42	10.7	1.18	30	0.87	7/8	22
F2-1212-JFS90M-S	12	3/4	19	1 1/16" - 12	2.19	55.5	0.54	13.8	2.17	55	1.26	1 1/4	32
F2-1616-JFS90M-S	16	1	25	1 5/16" - 12	2.83	72	0.63	16	2.80	71	1.50	1 1/2	38



F2-JFS90L

JIC Female Swivel 90° Bent Tube Long Drop



USE WITH TEXCEL HOSE SERIES

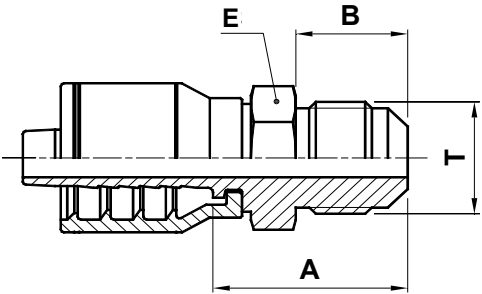
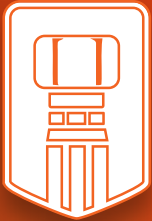
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-JFS90L	04	¼	6	7/16" - 20	1.16	29.5	0.34	8.7	1.81	46	0.55	9/16	14
F2-0406-JFS90L	04	¼	6	9/16" - 18	1.08	27.5	0.37	9.5	2.20	56	0.75	¾	19
F2-0606-JFS90L	06	⅜	10	9/16" - 18	1.40	35.5	0.37	9.5	2.20	56	0.75	¾	19
F2-0608-JFS90L	06	⅜	10	¾" - 16	1.46	37.1	0.42	10.7	2.44	62	0.87	7/8	22
F2-0808-JFS90L	08	½	12	¾" - 16	1.56	39.5	0.42	10.7	2.44	62	0.87	7/8	22
F2-0810-JFS90L	08	½	12	7/8" - 14	1.91	48.5	0.49	12.5	2.56	65	1.06	1 1/16	27
F2-1010-JFS90L	10	5/8	16	7/8" - 14	2.19	55.5	0.50	12.7	2.56	65	1.06	1 1/16	27
F2-1012-JFS90L	10	5/8	16	1 1/16" - 12	2.13	54	0.56	14.3	3.74	95	1.26	1 ¼	32
F2-1212-JFS90L	12	¾	19	1 1/16" - 12	2.17	55	0.56	14.3	3.74	95	1.26	1 ¼	32
F2-1616-JFS90L	16	1	25	1 5/16" - 12	2.83	72	0.63	16	4.33	110	1.50	1 ½	38

F2-SM

SAE Male

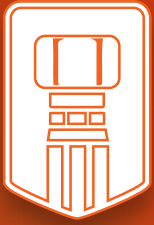


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

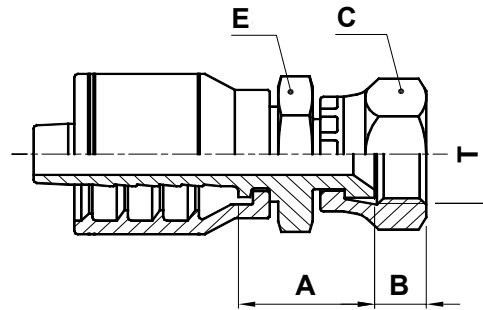
ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0606-SM	06	3/8	10	5/8" - 18	1.14	29	0.62	15.7	0.67	1 1/16	17
F2-1212-SM	12	3/4	19	1 1/16" - 14	1.89	47.9	1.00	25.4	1.06	1 1/16	27



F2-SFS

SAE Female Swivel



USE WITH TEXCEL HOSE SERIES

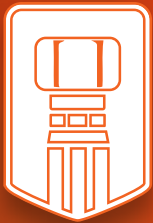
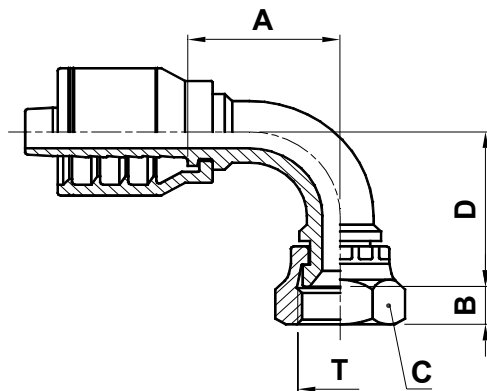
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
F2-0406-SFS	04	1/4	6	5/8" - 18	0.94	23.9	0.43	10.8	0.75	3/4	19	0.87	7/8	22
F2-0606-SFS	06	3/8	10	5/8" - 18	0.94	24	0.43	10.8	0.75	3/4	19	0.87	7/8	22
F2-1212-SFS	12	3/4	19	1 1/16" - 14	1.23	31.2	0.57	14.4	1.06	1 1/16	27	1.26	1 1/4	32

F2-SFS90

SAE Female Swivel 90° Bent Tube Medium Drop

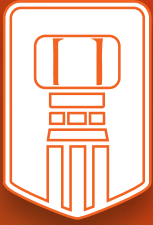


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

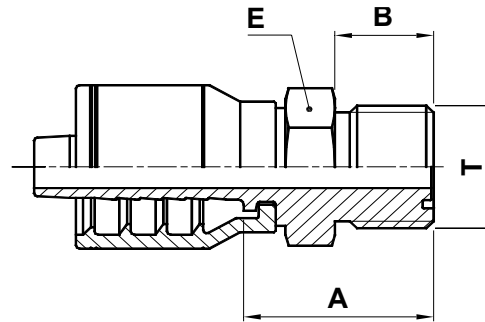
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0606-SFS90	06	3/8	10	5/8" - 18	1.46	37	0.43	10.8	1.46	37	0.87	7/8	22



F2-OM

ORFS Male



USE WITH TEXCEL HOSE SERIES

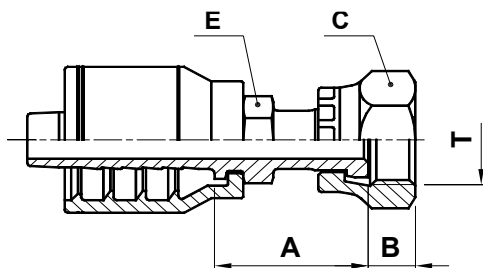
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-OM	04	1/4	6	9/16" - 18	0.96	24.3	0.39	9.8	0.59	5/8	15
F2-0406-OM	04	1/4	6	11/16" - 16	1.05	26.7	0.44	11.2	0.75	3/4	19
F2-0606-OM	06	3/8	10	11/16" - 16	1.04	26.5	0.44	11.2	0.75	3/4	19
F2-0608-OM	06	3/8	10	13/16" - 16	1.14	29	0.50	12.8	0.87	7/8	22
F2-0808-OM	08	1/2	12	13/16" - 16	1.16	29.5	0.50	12.8	0.87	7/8	22
F2-0810-OM	08	1/2	12	1" - 14	1.34	34	0.61	15.5	1.06	1 1/16	27
F2-1010-OM	10	5/8	16	1" - 14	1.24	31.4	0.61	15.5	1.06	1 1/16	27
F2-1012-OM	10	5/8	16	1 3/16" - 12	1.46	37.1	0.67	17	1.26	1 1/4	32
F2-1212-OM	12	3/4	19	1 3/16" - 12	1.48	37.6	0.67	17	1.26	1 1/4	32
F2-1216-OM	12	3/4	19	1 7/16" - 12	1.57	40	0.69	17.5	1.61	1 5/8	41
F2-1616-OM	16	1	25	1 7/16" - 12	1.63	41.5	0.69	17.5	1.61	1 5/8	41

F2-OFS

ORFS Female Swivel

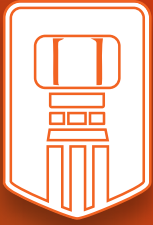


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

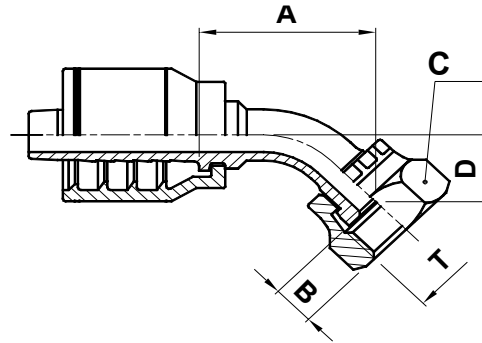
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C		E	C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]		[in]	[mm]
F2-0404-OFS	04	1/4	6	9/16" - 18	1.10	28	0.31	8	0.55	9/16	14	0.67	1 1/16	17
F2-0406-OFS	04	1/4	6	1 1/16" - 16	1.24	31.5	0.37	9.5	0.67	1 1/16	17	0.87	7/8	22
F2-0606-OFS	06	3/8	10	1 1/16" - 16	1.26	32	0.37	9.5	0.67	1 1/16	17	0.87	7/8	22
F2-0608-OFS	06	3/8	10	1 3/16" - 16	1.44	36.5	0.43	11	0.75	3/4	19	0.95	15/16	24
F2-0806-OFS	08	1/2	12	1 1/16" - 16	1.32	33.5	0.37	9.5	0.75	3/4	19	0.87	7/8	22
F2-0808-OFS	08	1/2	12	1 3/16" - 16	1.46	37	0.43	11	0.75	3/4"	19	0.95	15/16	24
F2-0810-OFS	08	1/2	12	1" - 14	1.54	39	0.53	13.5	0.95	15/16	24	1.18	1 3/16	30
F2-0812-OFS	08	1/2	12	1 3/16" - 12	1.73	44	0.57	14.5	1.18	1 3/16	30	1.42	1 7/16	36
F2-1010-OFS	10	5/8	16	1" - 14	1.54	39.1	0.53	13.5	0.95	15/16	24	1.12	1 3/16	30
F2-1012-OFS	10	5/8	16	1 3/16" - 12	1.74	44.1	0.57	14.5	1.18	1 3/16	30	1.42	1 7/16	36
F2-1210-OFS	12	3/4	19	1" - 14	1.65	42	0.53	13.5	1.06	1 1/16	27	1.18	1 3/16	30
F2-1212-OFS	12	3/4	19	1 3/16" - 12	1.76	44.6	0.57	14.5	1.18	1 3/16	30	1.42	1 7/16	36
F2-1216-OFS	12	3/4	19	1 7/16" - 12	2.03	51.5	0.58	14.8	1.42	1 7/16	36	1.61	1 5/8	41
F2-1616-OFS	16	1	25	1 7/16" - 12	2.09	53	0.58	14.8	1.42	1 7/16	36	1.61	1 5/8	41



F2-OFS45M

ORFS Female Swivel 45° Bent Tube Medium Drop



USE WITH TEXCEL HOSE SERIES

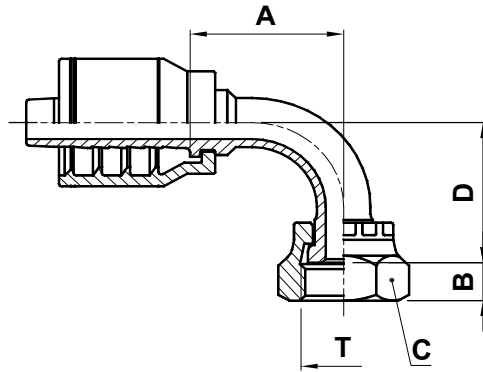
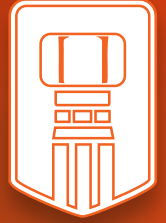
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-OFS45M	04	¼	6	9/16" - 18	1.16	29.5	0.31	8	0.43	10.9	0.67	1/16	17
F2-0406-OFS45M	04	¼	6	1/16" - 16	1.28	32.5	0.37	9.5	0.50	12.7	0.87	7/8	22
F2-0606-OFS45M	06	¾	10	1/16" - 16	1.40	35.5	0.37	9.5	0.45	11.5	0.87	7/8	22
F2-0608-OFS45M	06	¾	10	13/16" - 16	1.52	38.5	0.43	11	0.59	15	0.95	15/16	24
F2-0806-OFS45M	08	½	12	1/16" - 16	1.93	49	0.37	9.5	0.62	15.8	0.87	7/8	22
F2-0808-OFS45M	08	½	12	13/16" - 16	1.69	43	0.43	11	0.56	14.3	0.95	15/16	24
F2-0810-OFS45M	08	½	12	1" - 14	1.71	43.5	0.53	13.5	0.65	16.6	1.18	1 3/16	30
F2-1010-OFS45M	10	5/8	16	1" - 14	2.34	59.5	0.53	13.5	0.80	20.3	1.18	1 3/16	30
F2-1012-OFS45M	10	5/8	16	1 3/16" - 12	2.38	60.5	0.57	14.5	0.91	23.2	1.42	1 7/16	36
F2-1212-OFS45M	12	¾	19	1 3/16" - 12	2.38	60.4	0.57	14.5	0.9	21.9	1.42	1 7/16	36
F2-1216-OFS45M	12	¾	19	1 7/16" - 12	2.49	63.2	0.58	14.8	0.9	23.3	1.61	1 5/8	41
F2-1616-OFS45M	16	1	25	1 7/16" - 12	2.98	75.7	0.58	14.8	1.07	27.2	1.61	1 5/8	41

F2-OFS90M

ORFS Female Swivel 90° Bent Tube Medium Drop

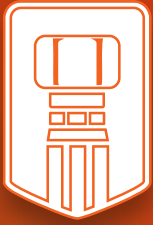


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

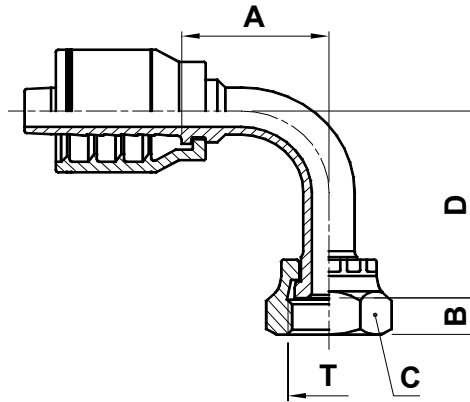
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-OFS90M	04	¼	6	9/16" - 18	1.08	27.5	0.31	8	0.89	22.5	0.67	1/16	17
F2-0406-OFS90M	04	¼	6	1 1/16" - 16	1.08	27.5	0.37	9.5	0.98	25	0.87	7/8	22
F2-0606-OFS90M	06	3/8	10	1 1/16" - 16	1.24	31.5	0.37	9.5	0.98	25	0.87	7/8	22
F2-0608-OFS90M	06	3/8	10	1 3/16" - 16	1.24	31.5	0.43	11	1.18	30	0.95	15/16	24
F2-0808-OFS90M	08	½	12	1 3/16" - 16	1.57	40	0.43	11	1.26	32	0.95	15/16	24
F2-0810-OFS90M	08	½	12	1" - 14	1.48	37.5	0.53	13.5	1.34	34	1.18	1 3/16	30
F2-1010-OFS90M	10	5/8	16	1" - 14	2.11	53.5	0.53	13.5	1.73	44	1.18	1 3/16	30
F2-1012-OFS90M	10	5/8	16	1 3/16" - 12	2.11	53.5	0.57	14.5	1.89	48	1.42	1 7/16	36
F2-1212-OFS90M	12	¾	19	1 3/16" - 12	2.24	57	0.57	14.5	1.89	48	1.42	1 7/16	36
F2-1216-OFS90M	12	¾	19	1 7/16" - 12	2.24	57	0.58	14.8	1.97	50	1.61	1 5/8	41
F2-1616-OFS90M	16	1	25	1 7/16" - 12	2.72	69	0.58	14.8	2.32	59	1.61	1 5/8	41



F2-OFS90L

ORFS Female Swivel 90° Bent Tube Long Drop



USE WITH TEXCEL HOSE SERIES

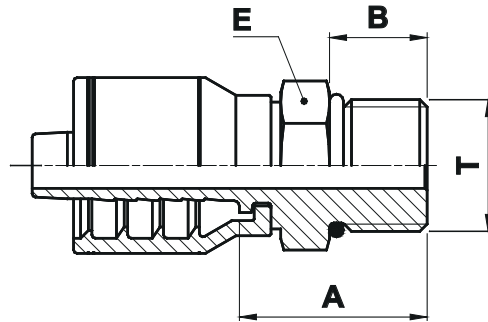
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-OFS90L	04	¼	6	9/16" - 18	1.16	29.5	0.31	8	1.81	46	0.75	¾	19
F2-0406-OFS90L	04	¼	6	1 1/16" - 16	1.22	30.9	0.37	9.5	2.13	54	0.87	7/8	22
F2-0606-OFS90L	06	¾	10	1 1/16" - 16	1.24	31.5	0.37	9.5	2.13	54	0.87	7/8	22
F2-0608-OFS90L	06	¾	10	1 3/16" - 16	1.24	31.5	0.43	11	2.52	64	0.95	15/16	24
F2-0808-OFS90L	08	½	12	1 3/16" - 16	1.57	40	0.43	11	2.52	64	0.95	15/16	24
F2-0810-OFS90L	08	½	12	1" - 14	1.77	45	0.53	13.5	2.76	70	1.18	1 3/16	30
F2-1010-OFS90L	10	5/8	16	1" - 14	2.11	53.5	0.53	13.5	2.76	70	1.18	1 3/16	30
F2-1012-OFS90L	10	5/8	16	1 3/16" - 12	2.11	53.5	0.57	14.5	1.89	48	1.42	1 7/16	36
F2-1212-OFS90L	12	¾	19	1 3/16" - 12	2.24	57	0.57	14.5	3.78	96	1.42	1 7/16	36
F2-1216-OFS90L	12	¾	19	1 7/16" - 12	2.24	57	0.58	14.8	1.97	50	1.61	1 5/8	41
F2-1616-OFS90L	16	1	25	1 7/16" - 12	2.77	70.3	0.58	14.8	4.49	114	1.61	1 5/8	41

F2-OBM

O-RING Boss Male

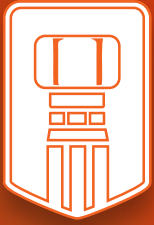


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

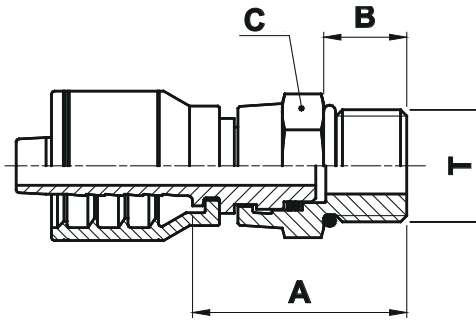
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-OBM	04	¼	6	7/16" - 20	0.87	22	0.36	9.15	0.55	9/16	14
F2-0405-OBM	04	¼	6	½" - 20	0.93	23.5	0.36	9.15	0.67	1 1/16	17
F2-0406-OBM	04	¼	6	9/16" - 18	0.96	24.5	0.39	10	0.67	1 1/16	17
F2-0606-OBM	06	⅜	10	9/16" - 18	0.96	24.5	0.39	9.9	0.67	1 1/16	17
F2-0608-OBM	06	⅜	10	¾" - 16	1.04	26.5	0.44	11.1	0.87	7/8	22
F2-0610-OBM	06	⅜	10	7/8" - 14	1.12	28.5	0.50	12.7	1.06	1 1/16	27
F2-0808-OBM	08	½	12	¾" - 16	1.06	27	0.44	11.1	0.87	7/8	22
F2-0810-OBM	08	½	12	7/8" - 14	1.14	29	0.50	12.7	1.06	1 1/16	27
F2-0812-OBM	08	½	12	1 1/16" - 12	1.26	32	0.59	15.1	1.26	1 ¼	32
F2-1010-OBM	10	5/8	16	7/8" - 14	1.14	29	0.50	12.7	1.06	1 1/16	27
F2-1012-OBM	10	5/8	16	1 1/16" - 12	1.26	32	0.59	15	1.26	1 ¼	32
F2-1212-OBM	12	¾	19	1 1/16" - 12	1.28	32.5	0.59	15	1.26	1 ¼	32
F2-1216-OBM	12	¾	19	1 5/16" - 12	1.52	38.5	0.59	15.1	1.42	1 7/16	36
F2-1616-OBM	16	1	25	1 5/16" - 12	1.54	39.1	0.59	15.1	1.50	1 ½	38



F2-OBMS

O-RING Boss Male Swivel



USE WITH TEXCEL HOSE SERIES

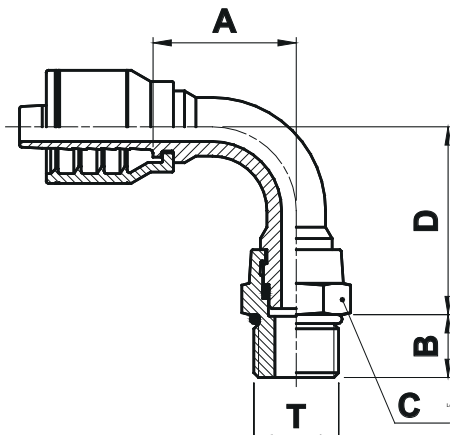
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-OBMS	04	1/4	6	7/16" - 20	1.44	36.5	0.36	9.15	0.67	1 1/16	17
F2-0606-OBMS	06	3/8	10	9/16" - 18	1.59	40.5	0.39	9.95	0.87	7/8	22
F2-0608-OBMS	06	3/8	10	3/4" - 16	1.87	47.5	0.44	11.1	1.06	1 1/16	27
F2-0808-OBMS	08	1/2	12	3/4" - 16	1.89	48	0.44	11.1	1.06	1 1/16	27
F2-0810-OBMS	08	1/2	12	7/8" - 14	2.01	51	0.50	12.7	1.06	1 1/16	27
F2-1010-OBMS	10	5/8	16	7/8" - 14	2.01	51	0.50	12.7	1.06	1 1/16	27
F2-1212-OBMS	12	3/4	19	1 1/16" - 12	2.26	57.5	0.59	15.1	1.42	1 7/16	36

F2-OBMS90

O-RING Boss Male Swivel 90°

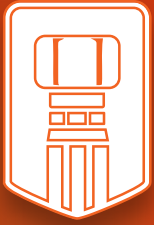


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

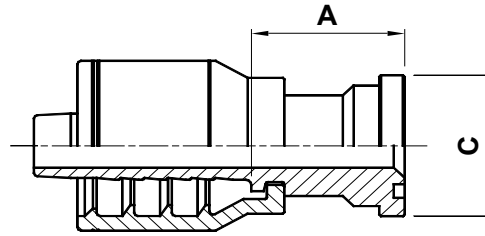
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0606-OBMS90	06	3/8	10	9/16" - 18	1.36	34.5	0.39	9.95	1.70	43.25	0.87	7/8	22
F2-0608-OBMS90	06	3/8	10	3/4" - 16	1.36	34.5	0.44	11.1	2.06	52.4	1.06	1 1/16	27
F2-0610-OBMS90	06	3/8	10	7/8" - 14	1.36	34.5	0.50	12.7	2.12	53.8	1.06	1 1/16	27
F2-0808-OBMS90	08	1/2	12	3/4" - 16	1.75	44.5	0.44	11.1	2.26	57.4	1.06	1 1/16	27
F2-0810-OBMS90	08	1/2	12	7/8" - 14	1.75	44.5	0.50	12.7	2.31	58.8	1.06	1 1/16	27
F2-1212-OBMS90	12	3/4	19	1 1/16" - 12	2.42	61.5	0.59	15.1	3.70	94	1.42	1 7/16	36



F2-FL

Code 61 Flange



USE WITH TEXCEL HOSE SERIES

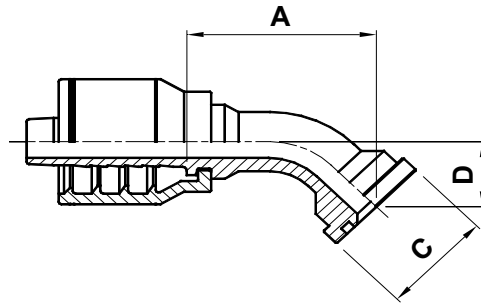
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]
F2-0808-FL	08	1/2	12	1/2"	1.50	38	1.19	30.2
F2-0812-FL	08	1/2"	12	3/4"	1.54	39	1.50	38
F2-1010-KFL	10	5/8	16	5/8"	2.56	65	1.35	34.2
F2-1212-FL	12	3/4	19	3/4"	1.56	39.5	1.50	38
F2-1216-FL	12	3/4	19	1"	1.81	46	1.75	44.4
F2-1616-FL	16	1	25	1"	1.87	47.5	1.75	44.4

F2-FL45

Code 61 Flange 45° Bend

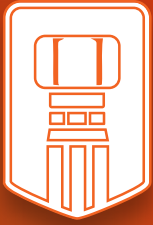


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

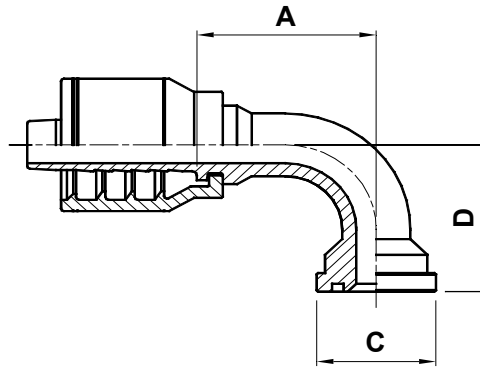
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F2-0808-FL45	08	½	12	½"	2.17	55.2	1.18	30	0.89	22.6
F2-0812-FL45	08	½	12	¾"	2.38	60.5	1.50	38	1.02	26
F2-1212-FL45	12	¾	19	¾"	2.70	68.5	1.50	38	1.10	27.9
F2-1216-FL45	12	¾	19	1"	2.77	70.5	1.75	44.4	1.14	29
F2-1616-FL45	16	1	25	1"	2.93	74.4	1.75	44.4	1.06	27
F2-1620-FL45	16	1	25	1 ¼"	3.00	76.2	2.00	50.8	1.14	29



F2-FL90

Code 61 Flange 90° Bend



USE WITH TEXCEL HOSE SERIES

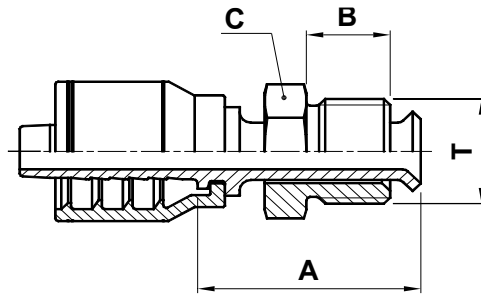
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F2-0808-FL90	08	½	12	½"	1.83	46.5	1.18	30	1.85	47
F2-0812-FL90	08	½	12	¾"	1.95	49.5	1.50	38	1.93	49
F2-1010-KFL90	10	⅝	16	⅝"	2.38	60.5	1.35	34.2	2.17	55
F2-1212-FL90	12	¾	19	¾"	2.19	55.5	1.50	38	2.28	58
F2-1216-FL90	12	¾	19	1"	2.19	55.5	1.75	44.4	2.34	59.5
F2-1616-FL90	16	1	25	1"	2.76	70	1.75	44.4	2.40	61
F2-1620-FL90	16	1	25	1 ¼"	2.75	69.9	2.00	50.8	2.40	61

F2-MIS

Male Inverted Swivel

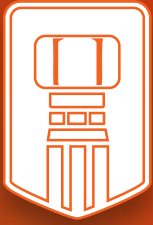


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

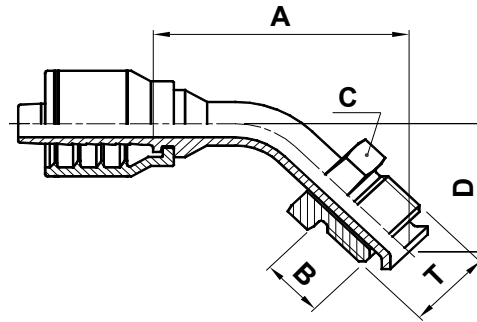
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-MIS	04	1/4	6	7/16" - 24	1.89	48	0.36	9.1	0.43	7/16	11
F2-0606-MIS	06	3/8	10	5/8" - 18	1.89	48	0.40	10.2	0.63	5/8	16
F2-0808-MIS	08	1/2	12	3/4" - 18	1.89	48	0.46	11.7	0.75	3/4	19



F2-MIS45

Male Inverted Swivel 45° Bent Tube



USE WITH TEXCEL HOSE SERIES

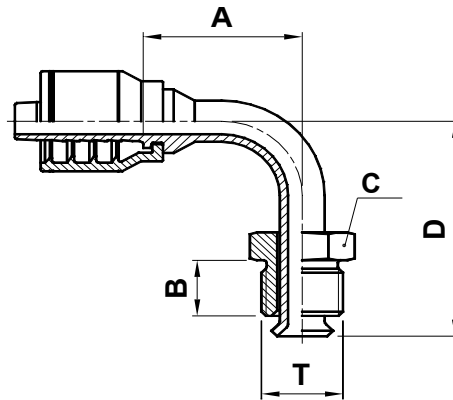
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0606-MIS45	06	3/8	10	5/8" - 18	1.87	47.5	0.40	10.2	0.75	19	0.63	5/8	16

F2-MIS90

Male Inverted Swivel 90° Bent Tube

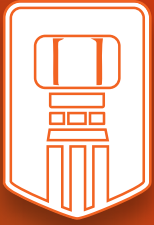


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

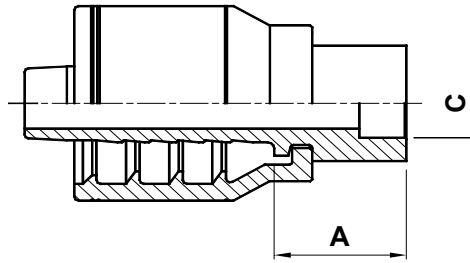
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-MIS90	04	¼	6	7/16" - 24	1.18	30	0.36	9.1	1.02	26	0.43	7/16	11
F2-0606-MIS90	06	¾	10	5/8" - 18	1.42	36	0.40	10.2	1.38	35	0.63	5/8	16



F2-BRF

Braze Female Solid



USE WITH TEXCEL HOSE SERIES

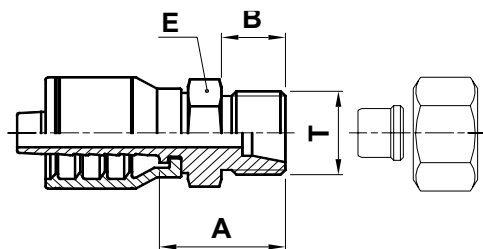
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		A		C	
		INCH	DN	[in]	[mm]	[in]	[mm]
F2-0404-BRF	04	1/4	6	0.57	14.5	0.26	6.5
F2-0606-BRF	06	3/8	10	0.65	16.5	0.38	9.5
F2-0808-BRF	08	1/2	12	0.67	17	0.51	12.8
F2-1010-BRF	10	5/8	16	0.67	17	0.63	16
F2-1212-BRF	12	3/4	19	0.73	18.5	0.76	19.2

F2-MFL

Male Flareless

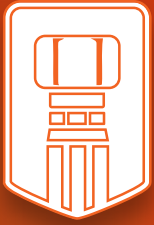


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

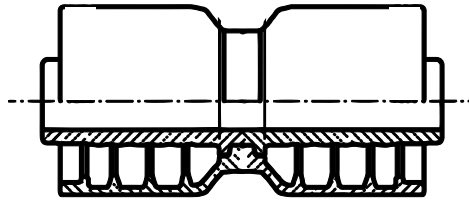
ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-MFL	04	1/4	6	7/16" - 20	0.94	24	0.45	11.5	0.55	9/16	14
F2-0405-MFL	04	1/4	6	1/2" - 20	0.98	25	0.45	11.5	0.67	1 1/16	17
F2-0605-MFL	06	3/8	10	1/2" - 20	0.98	25	0.45	11.5	0.67	1 1/16	17
F2-0606-MFL	06	3/8	10	9/16" - 18	1.00	25.5	0.47	11.9	0.67	1 1/16	17
F2-0608-MFL	06	3/8	10	3/4" - 16	1.09	27.8	0.56	14.3	0.75	3/4	19
F2-0808-MFL	08	1/2	12	3/4" - 16	1.12	28.5	0.56	14.3	0.75	3/4	19
F2-0810-MFL	08	1/2	12	7/8" - 14	1.26	32	0.63	15.9	0.95	15/16	24
F2-1212-MFL	12	3/4	19	1 1/16" - 12	1.38	35	0.69	17.5	1.06	1 1/16	27
F2-1616-MFL	16	1	25	1 5/16" - 12	1.63	41.5	0.69	17.5	1.42	1 7/16	36



F2-JNR

Joiner



USE WITH TEXCEL HOSE SERIES

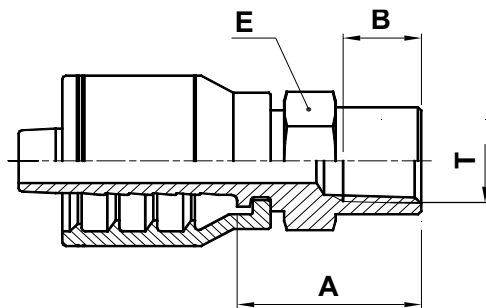
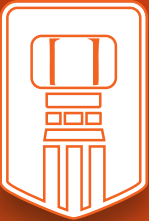
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE	
		INCH	DN
F2-0404-JNR	04	1/4"	6
F2-0606-JNR	06	3/8"	10
F2-0808-JNR	08	1/2"	12
F2-1010-JNR	10	5/8"	16
F2-1212-JNR	12	3/4"	19
F2-1616-JNR	16	1"	25

F2-FG

Female Solid Grease Line Fitting

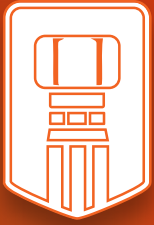


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

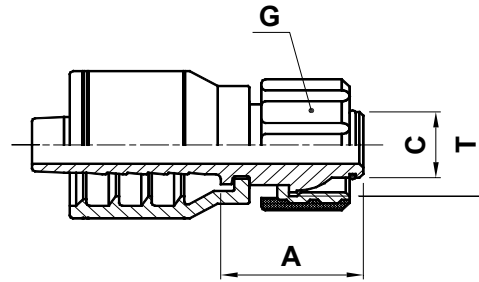
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0408-FG	04	1/4	6	1/2" - 27	0.89	22.5	0.30	7.72	0.67	1 1/16	17



F2-PWFS

Pressure Washer Female Swivel



USE WITH TEXCEL HOSE SERIES

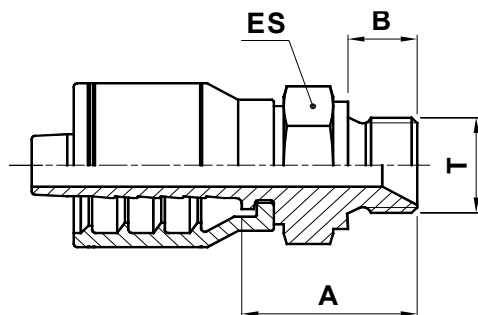
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

Code	HOSE			THREAD SIZE	A		B		C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F2-0422-PWFS	04	1/4	6	M22X1.5	1.22	31	.55	14	1.42	36
F2-0622-PWFS	06	3/8	10	M22X1.5	1.22	31	.55	14	1.42	36

F2-BPM

BSP Parallel Male

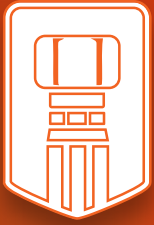


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

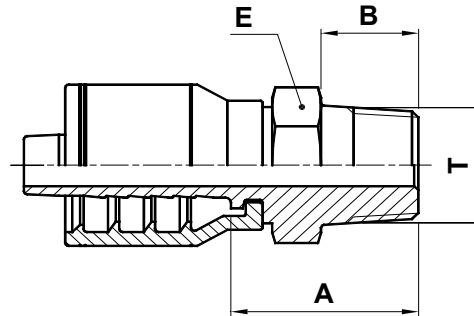
ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0402-BPM	04	1/4	6	1/8" - 28	0.87	22	0.31	8	0.55	9/16	14
F2-0404-BPM	04	1/4	6	1/4" - 19	1.04	26.5	0.43	11	0.745	3/4	19
F2-0606-BPM	06	3/8	10	3/8" - 19	1.12	28.5	0.47	12	0.87	7/8	22
F2-0608-BPM	06	3/8	10	1/2" - 14	1.32	33.5	0.55	14	1.06	1 1/16	27
F2-0808-BPM	08	1/2	12	1/2" - 14	1.34	34	0.55	14	1.06	1 1/16	27
F2-1212-BPM	12	3/4	19	3/4" - 14	1.56	39.5	0.63	16	1.26	1 1/4	32
F2-1616-BPM	16	1	25	1" - 11	1.65	42	0.75	19	1.61	1 5/8	41



F2-BTM

BSP Taper Male



USE WITH TEXCEL HOSE SERIES

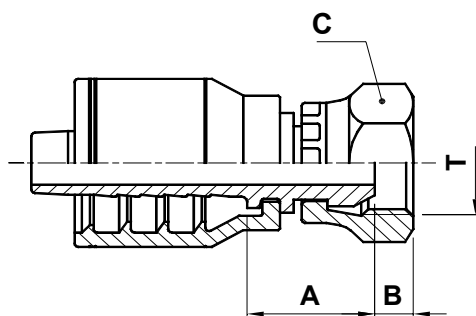
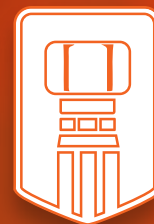
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-BTM	04	1/4	6	1/4" - 19	1.04	26.5	0.55	14	0.55	9/16	14
F2-0606-BTM	06	3/8	10	3/8" - 19	1.14	29	0.59	15	0.75	3/4	19
F2-0608-BTM	06	3/8	10	1/2" - 14	1.26	32	0.71	18	0.87	7/8	22
F2-0808-BTM	08	1/2	12	1/2" - 14	1.28	32.5	0.71	18	0.87	7/8	22
F2-1010-BTM	10	5/8	16	5/8" - 14	1.42	36	0.75	19	0.95	15/16	24
F2-1212-BTM	12	3/4	19	3/4" - 14	1.67	42.5	0.79	20	1.06	1 1/16	27
F2-1616-BTM	16	1	25	1" - 11	1.85	47	0.91	23	1.42	1 7/16	36

F2-BFS

BSPP Female Swivel

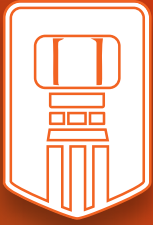


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

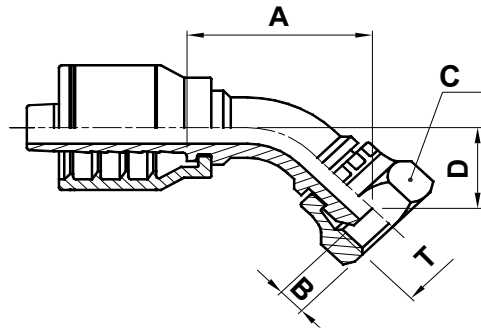
ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		C		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0402-BFS	04	¼	6	⅛" - 28	0.59	15	0.22	5.5	0.55	9/16	14
F2-0404-BFS	04	¼	6	¼" - 19	0.69	17.5	0.17	4.2	0.75	¾	19
F2-0406-BFS	04	¼	6	⅜" - 19	0.73	18.5	0.24	6	0.87	7/8	22
F2-0604-BFS	06	⅜	10	¼" - 19	0.70	17.8	0.17	4.2	0.75	¾	19
F2-0606-BFS	06	⅜	10	⅜" - 19	0.73	18.5	0.24	6	0.87	7/8	22
F2-0608-BFS	06	⅜	10	½" - 14	0.81	20.5	0.26	6.5	1.06	1 1/16	27
F2-0806-BFS	08	½	12	⅜" - 19	0.75	19	0.24	6	0.87	7/8	22
F2-0808-BFS	08	½	12	½" - 14	0.83	21	0.26	6.5	1.06	1 1/16	27
F2-0810-BFS	08	½	12	5/8" - 14	0.71	18	0.37	9.5	1.06	1 1/16	27
F2-1010-BFS	10	5/8	16	5/8" - 14	0.71	18	0.37	9.5	1.06	1 1/16	27
F2-1012-BFS	10	5/8	16	¾" - 14	0.84	21.3	0.34	8.7	1.26	1 ¼	32
F2-1212-BFS	12	¾	19	¾" - 14	0.86	21.8	0.34	8.7	1.26	1 ¼	32
F2-1616-BFS	16	1	25	1" - 11	1.12	28.5	0.41	10.5	1.50	1 ½	38



F2-BSPFS45

BSPP Female Swivel 45° Bent Tube



USE WITH TEXCEL HOSE SERIES

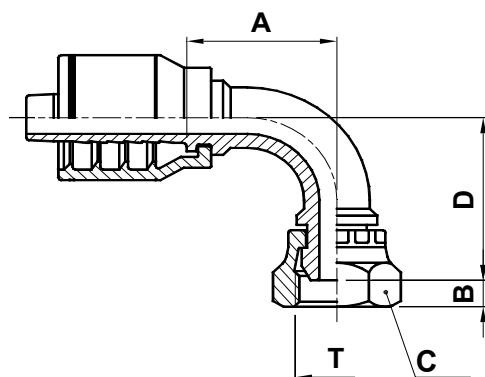
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-BSPFS45	04	¼	6	¼" - 19	1.28	32.5	0.17	4.2	0.51	13	0.75	¾	19
F2-0606-BSPFS45	06	⅜	10	⅜" - 19	1.48	37.6	0.24	6	0.58	14.6	0.87	⅞	22
F2-0808-BSPFS45	08	½	12	½" - 14	1.81	45.9	0.26	6.5	0.71	18	1.06	1 ⅙	27
F2-1010-BSPFS45	10	⅝	16	⅝" - 14	2.38	60.5	0.37	9.5	0.92	23.3	1.06	1 ⅙	27
F2-1212-BSPFS45	12	¾	19	¾" - 14	2.66	67.4	0.34	8.7	0.79	20.2	1.26	1 ¼	32
F2-1616-BSPFS45	16	1	25	1" - 11	3.29	83.6	0.41	10.5	1.33	33.8	1.50	1 ½	38

F2-BSPFS90

BSPF Female Swivel 90° Bent Tube

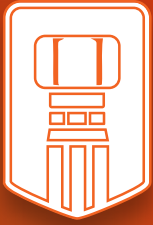


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

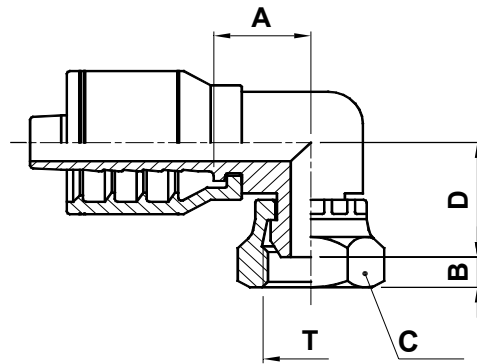
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-BSPFS90	04	1/4	6	1/4" - 19	1.09	27.6	0.17	4.2	1.08	27.5	0.75	3/4	19
F2-0406-BSPFS90	04	1/4	6	3/8" - 19	1.10	28	0.24	6	1.16	29.5	0.87	7/8	22
F2-0606-BSPFS90	06	3/8	10	3/8" - 19	1.24	31.5	0.24	6	1.16	29.5	0.87	7/8	22
F2-0608-BSPFS90	06	3/8	10	1/2" - 14	1.19	30.3	0.26	6.5	1.23	31.1	1.06	1 1/16	27
F2-0808-BSPFS90	08	1/2	12	1/2" - 14	1.47	37.2	0.26	6.5	1.42	36	1.06	1 1/16	27
F2-0810-BSPFS90	08	1/2	12	5/8" - 14	1.83	46.5	0.37	9.5	1.93	49	1.06	1 1/16	27
F2-1010-BSPFS90	10	5/8	16	5/8" - 14	2.13	54	0.37	9.5	1.97	50	1.06	1 1/16	27
F2-1212-BSPFS90	12	3/4	19	3/4" - 14	2.20	56	0.34	8.7	2.31	58.8	1.26	1 1/4	32
F2-1616-BSPFS90	16	1	25	1" - 11	2.83	72	0.41	10.5	2.80	71	1.50	1 1/2	38



F2-BSPFS90-B

BSPF Female Swivel 90° Bent Tube - Block Style



USE WITH TEXCEL HOSE SERIES

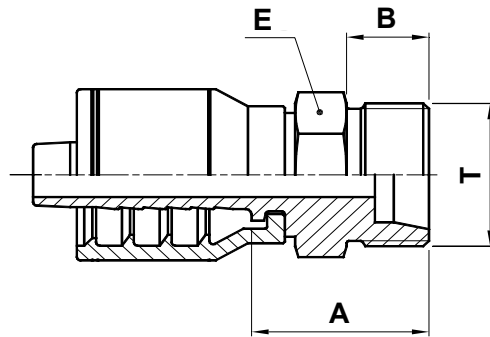
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0404-BSPFS90-B	04	1/4"	6	1/4" - 19	0.73	18.5	0.17	4.2	0.89	22.6	0.75	3/4"	19
F2-0606-BSPFS90-B	06	3/8"	10	3/8" - 19	0.85	21.5	0.22	5.7	1.00	25.5	0.87	7/8"	22

F2-DLM

DKL Male

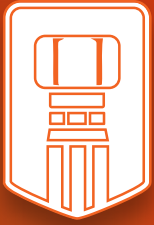


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

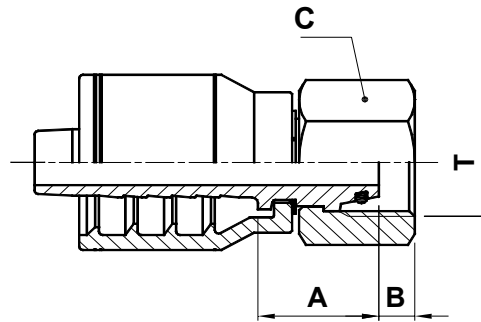
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		E		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]
F2-0412-DLM	04	¼	6	M12X1.5	6L	0.89	22.5	0.39	10	0.55	9/16	14
F2-0414-DLM	04	¼	6	M14X1.5	8L	0.89	22.5	0.39	10	0.55	9/16	14
F2-0416-DLM	04	¼	6	M16X1.5	10L	0.96	24.5	0.43	11	0.67	11/16	17
F2-0616-DLM	06	¾	10	M16X1.5	10L	0.96	24.5	0.43	11	0.67	11/16	17
F2-0618-DLM	06	¾	10	M18X1.5	12L	0.98	25	0.43	11	0.75	¾	19
F2-0622-DLM	06	¾	10	M22X1.5	15L	1.02	26	0.47	12	0.87	7/8	22
F2-0822-DLM	08	½	12	M22X1.5	15L	1.04	26.5	0.47	12	0.87	7/8	22
F2-0826-DLM	08	½	12	M26X1.5	18L	1.04	26.5	0.47	12	0.87	7/8	22
F2-1026-DLM	10	5/8	16	M26X1.5	18L	1.14	29	0.47	12	1.06	1 1/16	27
F2-1230-DLM	12	¾	19	M30X2	22L	1.24	31.5	0.55	14	1.18	1 3/16	30
F2-1636-DLM	16	1	25	M36X2	28L	1.34	34	0.55	14	1.42	1 7/16	36



F2-DLFS

DKOL Female Swivel



USE WITH TEXCEL HOSE SERIES

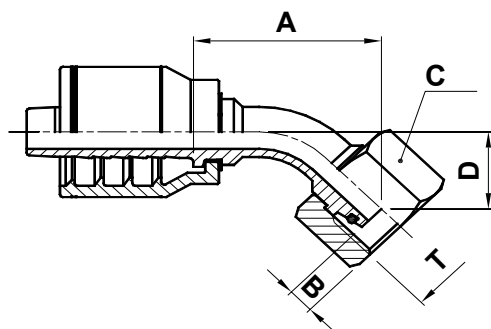
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0412-DLFS	04	¼	6	M12X1.5	6L	0.82	20.9	0.10	2.6	0.63	5/8	16
F2-0414-DLFS	04	¼	6	M14X1.5	8L	0.98	25	0.06	1.5	0.67	11/16	17
F2-0416-DLFS	04	¼	6	M16X1.5	10L	1.04	26.5	0.06	1.5	0.75	¾	19
F2-0616-DLFS	06	¾	10	M16X1.5	10L	0.91	23	0.14	3.5	0.75	¾	19
F2-0618-DLFS	06	¾	10	M18X1.5	12L	1.02	26	0.06	1.5	0.87	7/8	22
F2-0822-DLFS	08	½	12	M22X1.5	15L	1.12	28.5	0.10	2.5	1.06	1 1/16	27
F2-0826-DLFS	08	½	12	M26X1.5	18L	1.14	29	0.08	2	1.26	1 ¼	32
F2-1026-DLFS	10	5/8	16	M26X1.5	18L	1.14	29	0.08	2	1.26	1 ¼	32
F2-1230-DLFS	12	¾	19	M30X2	22L	1.06	27	0.14	3.5	1.42	1 7/16	36
F2-1636-DLFS	16	1	25	M36X2	28L	1.26	32	0.14	3.5	1.61	1 5/8	41

F2-DLFS45

DKOL Female Swivel 45° Bent Tube

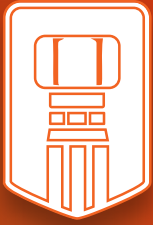


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

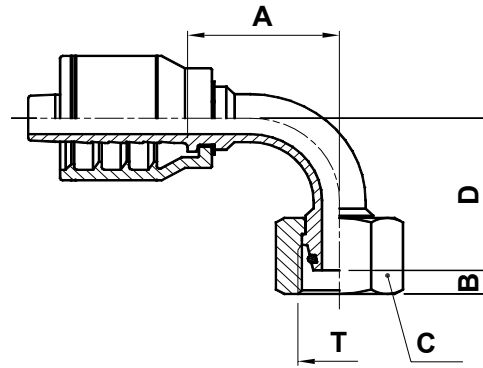
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		D		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0412-DLFS45	04	¼	6	M12X1.5	6L	1.54	39	0.10	2.6	0.59	15	0.63	⅝	16
F2-0414-DLFS45	04	¼	6	M14X1.5	8L	1.39	35.2	0.06	1.5	0.61	15.5	0.67	11/16	17
F2-0616-DLFS45	06	⅜	10	M16X1.5	10L	1.76	44.6	0.14	3.5	0.86	21.7	0.75	¾	19
F2-0618-DLFS45	06	⅜	10	M18X1.5	12L	1.68	42.6	0.06	1.5	0.76	19.2	0.87	7/8	22
F2-0826-DLFS45	08	½"	12	M26x1.5	15L	2.72	69	0.08	2	1.07	27.2	1.26	1 ¼	32
F2-1026-DLFS45	10	⅝	16	M26X1.5	15L	2.46	62.5	0.08	2	1.00	25.5	1.26	1 ¼	32
F2-1230-DLFS45	12	¾	19	M30X2	22L	3.07	78	0.14	3.5	1.26	32	1.42	1 7/16	36
F2-1636-DLFS45	16	1	25	M36X2	28L	3.56	90.5	0.14	3.5	1.40	35.5	1.61	1 ⅝	41



F2-DLFS90

DKOL Female Swivel 90° Bent Tube



USE WITH TEXCEL HOSE SERIES

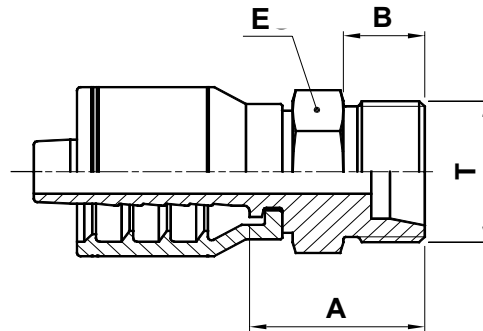
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		D		C		
	SIZE INCH	DN				[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0412-DLFS90	04 ¼	6		M12X1.5	6L	1.21	30.7	0.10	2.6	1.18	30	0.63	⅝	16
F2-0414-DLFS90	04 ¼	6		M14X1.5	8L	1.10	28	0.06	1.5	1.22	31	0.67	1⅛	17
F2-0416-DLFS90	04 ¼	6		M16X1.5	10L	1.11	28.2	0.06	1.5	1.28	32.5	0.75	¾	19
F2-0616-DLFS90	06 ⅝	10		M16X1.5	10L	1.34	34	0.14	3.5	1.56	39.5	0.75	¾	19
F2-0618-DLFS90	06 ⅝	10		M18X1.5	12L	1.20	30.5	0.06	1.5	1.42	36	0.87	⅞	22
F2-0822-DLFS90	08 ½	12		M22X1.5	15L	1.50	38.2	0.10	2.5	1.57	40	1.06	1 ⅛	27
F2-0826-DLFS90	08 ½	12		M26X1.5	18L	1.54	39	0.08	2	1.93	49	1.26	1 ¼	32
F2-1026-DLFS90	10 ⅝	16		M26X1.5	18L	2.13	54	0.08	2	2.09	53	1.26	1 ¼	32
F2-1230-DLFS90	12 ¾	19		M30X2	22L	2.19	55.5	0.14	3.5	2.24	57	1.42	1 ⅞	36
F2-1636-DLFS90	16 1	25		M36X2	28L	3.09	78.6	0.14	3.5	2.95	75	1.61	1 ⅝	41

F2-DHM

DKS Male

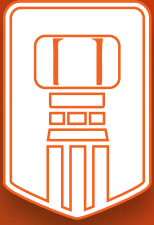


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

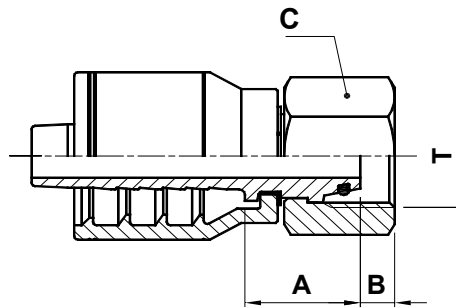
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		E		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0416-DHM	04	¼	6	M16X1.5	8S	1.02	26	0.47	12	0.67	1 ¹ / ₁₆	17
F2-0418-DHM	04	¼	6	M18X1.5	10S	1.02	26	0.47	12	0.75	¾	19
F2-0620-DHM	06	⅜	10	M20X1.5	12S	1.02	26	0.47	12	0.87	7 ⁷ / ₈	22
F2-0622-DHM	06	⅜	10	M22X1.5	14S	1.10	28	0.55	14	0.87	7 ⁷ / ₈	22
F2-0824-DHM	08	½	12	M24X1.5	16S	1.12	28.5	0.55	14	0.95	15 ¹⁵ / ₁₆	24
F2-1030-DHM	10	⅝	16	M30X2	20S	1.30	33	0.63	16	1.18	1 3 ³ / ₁₆	30
F2-1236-DHM	12	¾	19	M36X2	25S	1.44	36.5	0.71	18	1.42	1 7 ⁷ / ₁₆	36
F2-1642-DHM	16	1	25	M42X2	30S	1.61	41	0.79	20	1.81	1 13 ¹³ / ₁₆	46



F2-DHFS

DKOS Female Swivel



USE WITH TEXCEL HOSE SERIES

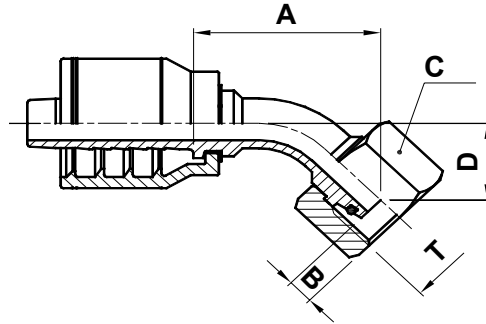
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0414-DHFS	04	¼	6	M14X1.5	6S	0.87	22	0.10	2.5	0.67	11/16	17
F2-0416-DHFS	04	¼	6	M16X1.5	8S	1.04	26.5	0.10	2.5	0.75	¾	19
F2-0418-DHFS	04	¼	6	M18X1.5	10S	1.10	28	0.08	2	0.87	7/8	22
F2-0620-DHFS	06	⅜	10	M20X1.5	12S	1.00	25.5	0.08	2	0.95	15/16	24
F2-0622-DHFS	06	⅜	10	M22X1.5	14S	1.12	28.5	0.16	4	1.06	1 1/16	27
F2-0824-DHFS	08	½	12	M24X1.5	16S	1.30	33	0.12	3	1.18	1 3/16	30
F2-1030-DHFS	10	⅝	16	M30X2	20S	1.34	34	0.14	3.5	1.42	1 7/16	36
F2-1230-DHFS	12	¾	19	M30X2	20S	1.36	34.5	0.14	3.5	1.42	1 7/16	36
F2-1236-DHFS	12	¾	19	M36X2	25S	1.56	39.5	0.12	3	1.81	1 13/16	46
F2-1642-DHFS	16	1	25	M42X2	30S	1.69	43	0.24	6	1.97	2	50

F2-DHFS45

DKOS Female Swivel 45° Bent Tube

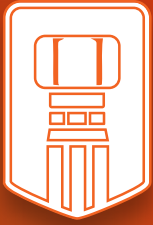


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

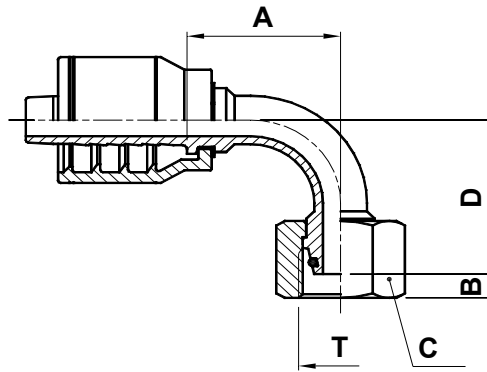
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		D		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0414-DHFS45	04	¼	6	M14X1.5	6S	1.40	35.5	0.10	2.5	0.63	16	0.67	1⅛	17
F2-0416-DHFS45	04	¼	6	M16X1.5	8S	1.43	36.3	0.10	2.5	0.65	16.6	0.75	¾	19
F2-0418-DHFS45	04	¼	6	M18X1.5	10S	1.48	37.7	0.08	2	0.71	18	0.87	⅞	22
F2-0620-DHFS45	06	⅜	10	M20X1.5	12S	1.65	42	0.08	2	0.76	19.2	0.95	1⅝	24
F2-0622-DHFS45	06	⅜	10	M22X1.5	14S	1.95	49.5	0.16	4	0.92	23.4	1.06	1 ⅛	27
F2-0824-DHFS45	08	½	12	M24X1.5	16S	1.97	49.9	0.12	3	0.89	22.6	1.18	1 ⅜	30
F2-1030-DHFS45	10	⅝	16	M30X2	20S	2.32	59	0.14	3.5	1.02	26	1.42	1 ⅞	36
F2-1230-DHFS45	12	¾	19	M30X2	25S	3.11	79	0.14	3.5	1.32	33.5	1.42	1 ⅞	36
F2-1236-DHFS45	12	¾	19	M36X2	30S	3.21	81.5	0.12	3	1.36	34.5	1.81	1 13⁄16	46



F2-DHFS90

DKOS Female Swivel 90° Bent Tube



USE WITH TEXCEL HOSE SERIES

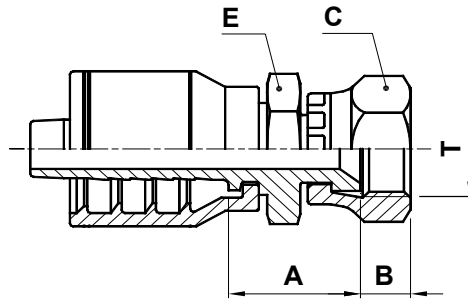
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		D		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0414-DHFS90	04	¼	6	M14X1.5	6S	1.10	28	0.10	2.5	1.25	31.8	0.67	1 1⁄16	17
F2-0416-DHFS90	04	¼	6	M16X1.5	8S	1.11	28.2	0.10	2.5	1.28	32.5	0.75	¾	19
F2-0418-DHFS90	04	¼	6	M18X1.5	10S	1.11	28.2	0.08	2	1.36	34.5	0.87	7⁄8	22
F2-0620-DHFS90	06	¾	10	M20X1.5	12S	1.20	30.5	0.08	2	1.42	36	0.95	15⁄16	24
F2-0622-DHFS90	06	¾	10	M22X1.5	14S	1.52	38.5	0.16	4	1.81	46	1.06	1 1⁄16	27
F2-0824-DHFS90	08	½	12	M24X1.5	16S	1.71	43.5	0.12	3	1.81	46	1.18	1 3⁄16	30
F2-1030-DHFS90	10	5⁄8	16	M30X2	20S	2.05	52	0.14	3.5	2.11	53.5	1.42	1 7⁄16	36
F2-1230-DHFS90	12	¾	19	M30X2	20S	2.38	60.5	0.14	3.5	2.39	60.6	1.42	1 7⁄16	36
F2-1236-DHFS90	12	¾	19	M36X2	25S	2.85	72.5	0.12	3	2.85	72.5	1.81	1 13⁄16	46
F2-1642-DHFS90	16	1	25	M42X2	30S	2.91	74	0.24	6	2.95	75	1.97	2	50

F2-JISS

JIS Female Swivel 30° Seat

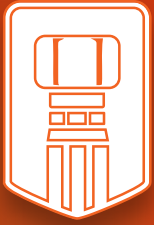


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

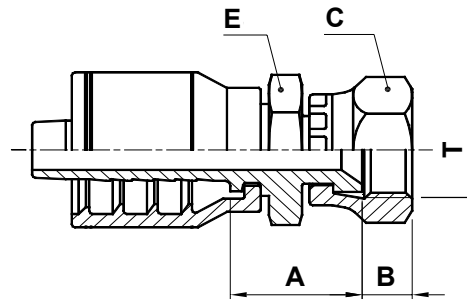
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]
F2-0404-JISS	04	¼	6	¼" - 19	0.83	21	0.31	8	0.748	¾	19
F2-0606-JISS	06	⅜	10	⅜" -19	0.87	22	0.37	9.5	0.748	¾	19
F2-0808-JISS	08	½	12	½" - 14	0.98	25	0.43	11	0.866	7/8	22
F2-1212-JISS	12	¾	19	¾" - 14	1.10	28	0.49	12.5	1.181	1 ⅜	30
F2-1616-JISS	16	1	25	1" - 11	1.30	33	0.55	14	1.260	1 ½	32



F2-KFS

Komatsu Female Swivel 30° Seat



USE WITH TEXCEL HOSE SERIES

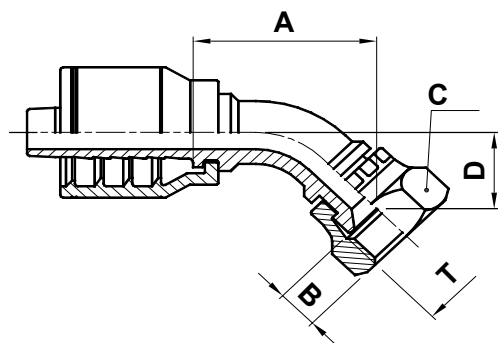
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E			C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]	[in]	[in]	[mm]
F2-0414-KFS	04	¼	6	M14X1.5	0.94	24	0.39	10	0.75	¾	19	0.75	¾	19
F2-0618-KFS	06	⅜	10	M18X1.5	0.94	24	0.45	11.5	0.75	¾	19	0.95	15⁄16	24
F2-0622-KFS	06	⅜	10	M22X1.5	1.00	25.5	0.55	14	0.75	¾	19	1.06	1 1⁄16	27
F2-0822-KFS	08	½	12	M22X1.5	1.06	27	0.55	14	0.87	7⁄8	22	1.06	1 1⁄16	27
F2-0824-KFS	08	½	12	M24X1.5	1.12	28.5	0.59	15.1	0.95	15⁄16	24	1.26	1 ¼	32
F2-1024-KFS	10	⅝	16	M24X1.5	1.12	28.4	0.59	15.1	0.95	15⁄16	24	1.26	1 ¼	32
F2-1224-KFS	12	¾	19	M24X1.5	1.18	29.9	0.59	15.1	1.063	1 1⁄16	27	1.26	1 ¼	32
F2-1230-KFS	12	¾	19	M30X1.5	1.31	33.2	0.72	18.3	1.18	1 3⁄16	30	1.42	1 7⁄16	36
F2-1233-KFS	12	¾	19	M33X1.5	1.27	32.2	0.84	21.3	1.26	1 ¼	32	1.61	1 5⁄8	41
F2-1633-KFS	16	1	25	M33X1.5	1.37	34.7	0.84	21.3	1.26	1 ¼	32	1.61	1 5⁄8	41

F2-KFS45

Komatsu Female Swivel 30° Seat 45° Bent Tube

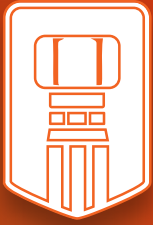


USE WITH TEXCEL HOSE SERIES

HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

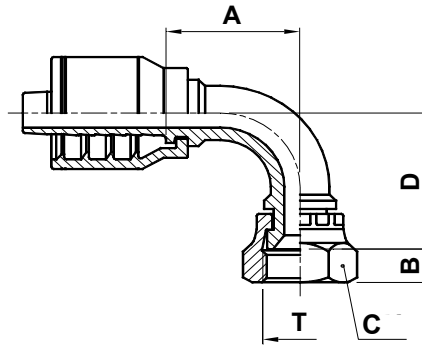
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0414-KFS45	04	¼	6	M14X1.5	1.67	42.5	0.39	10	0.63	16	0.75	¾	19
F2-0618-KFS45	06	⅜	10	M18X1.5	2.03	51.5	0.45	11.5	0.77	19.5	0.95	1⅝	24
F2-0822-KFS45	08	½	12	M22X1.5	2.13	54	0.55	14	0.79	20	1.06	1 ⅛	27
F2-1024-KFS45	10	⅝	16	M24X1.5	2.78	70.5	0.59	15.1	1.06	27	1.26	1 ¼	32
F2-1230-KFS45	12	¾	19	M30X1.5	3.21	81.5	0.72	18.3	1.11	28.3	1.42	1 ⅞	36



F2-KFS90

Komatsu Female Swivel 30° Seat 90° Bent Tube



USE WITH TEXCEL HOSE SERIES

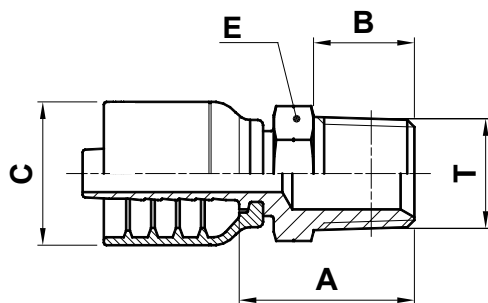
HB3K, HB3K-XT, HB4K, HB5K, HB5K-XT, HB6K, HBR1, HBR2, HHT2

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F2-0414-KFS90	04	1/4	6	M14X1.5	1.14	29	0.39	10	1.24	31.5	0.75	3/4	19
F2-0618-KFS90	06	3/8	10	M18X1.5	1.40	35.5	0.45	11.5	1.50	38	0.95	15/16	24
F2-0822-KFS90	08	1/2	12	M22X1.5	1.87	47.5	0.55	14	1.69	43	1.06	1 1/16	27
F2-1024-KFS90	10	5/8	16	M24X1.5	2.19	55.5	0.59	15.1	2.17	55	1.26	1 1/4	32
F2-1230-KFS90	12	3/4	19	M30X1.5	2.17	55	0.72	18.3	2.20	56	1.42	1 7/16	36

F5-PM

NPT Male

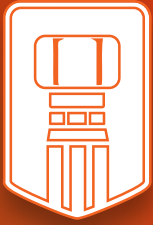


USE WITH TEXCEL HOSE SERIES

HBR5, HBHTR5

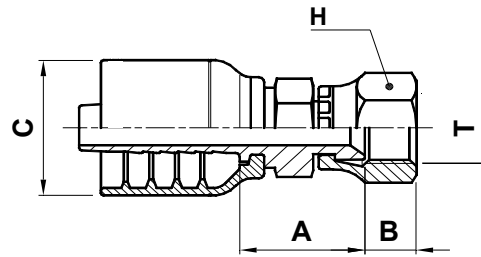
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		C		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]
F5-0404-PM	04	3/16	5	1/4" - 18	1.00	25.5	0.55	14	0.83	21	0.55	9/16	14
F5-0504-PM	05	1/4"	6	1/4" - 18	1.04	26.5	0.55	14	0.91	3	0.5	9/16"	4
F5-0606-PM	06	5/16	8	3/8" - 18	1.10	28	0.55	14	0.94	24	0.75	3/4	19
F5-0808-PM	08	13/32	10	1/2" - 14	1.30	33	0.75	19	1.06	27	0.87	7/8	22
F5-1212-PM	12	5/8	16	3/4" - 14	1.61	41	0.75	19	1.46	37	1.06	1 1/16	27
F5-1616-PM	16	7/8	22	1" - 11 1/2"	1.87	47.5	0.94	24	1.69	43	1.42	1 7/16	36
F5-2020-PM	20	1 1/8	28	1 1/4"-11 1/2"	2.35	59.5	0.96	24.5	1.93	49	1.81	1 13/16	46
F5-2424-PM	24	1 3/8	35	1 1/2"-11 1/2"	2.38	60.5	1.00	25.5	2.13	54	1.97	2	50
F5-3232-PM	32	1 13/16	46	2" - 11 1/2"	2.95	75	1.02	26	2.56	65	2.56	2 9/16	65



F5-JFS

JIC Female Swivel



USE WITH TEXCEL HOSE SERIES

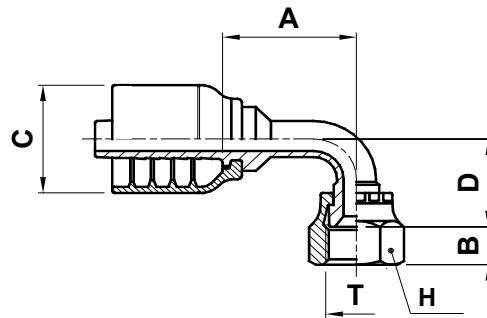
HBR5, HBHTR5

ONE PIECE FITTING

CODE	HOSE		THREAD SIZE	A		B		C		E		H			
	SIZE INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]		
F5-0404-JFS	04 3⁄16	5	7⁄16"-20	0.77	19.5	0.34	8.7	0.83	21	0.44	7⁄16	11.11	0.55	9⁄16	14
F5-0505-JFS	05 1⁄4"	6	1⁄2" - 20	0.85	21.5	0.37	9.5	0.91	3	0.55	9⁄16	14	.67	11⁄16	17
F5-0606-JFS	06 5⁄16	8	9⁄16"-18	0.79	20	0.37	9.5	0.94	24	0.55	9⁄16	14	0.75	3⁄4	19
F5-0808-JFS	08 13⁄32	10	3⁄4"-16	1.02	26	0.42	10.7	1.06	27	0.75	3⁄4	19	0.87	7⁄8	22
F5-1010-JFS	10 1⁄2	12	7⁄8" - 14	1.12	28.5	0.50	12.7	1.22	31	0.87	7⁄8	22	1.06	1 1⁄16	27
F5-1212-JFS	12 5⁄8	16	1 1⁄16"-12	1.34	34	0.56	14.3	1.46	37	1.06	1 1⁄16	27	1.26	1 1⁄4	32
F5-1616-JFS	16 7⁄8	22	1 5⁄16"-12	1.46	37	0.63	.35	1.69	43	1.26	1 1⁄4	32	1.50	1 1⁄2	38
F5-2020-JFS	20 1 1⁄8	28	1 5⁄8"-12	1.97	50.1	0.63	15.9	1.93	49	1.161	1 5⁄8	41	1.97	2	50
F5-2424-JFS	24 1 3⁄8	35	1 7⁄8"-12	2.10	53.4	0.73	18.6	2.13	54	1.97	2	50	2.17	2 3⁄16	55
F5-3232-JFS	32 1 13⁄16	46	2 1⁄2"-12	1.85	47	0.94	24	2.56	65	2.56	2 9⁄16	65	2.95	2 15⁄16	75

F5-JFS90M

JIC Female Swivel 90° Bent Tube Medium Drop

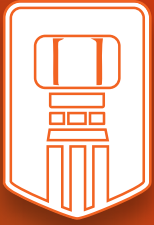


USE WITH TEXCEL HOSE SERIES

HBR5, HBHTR5

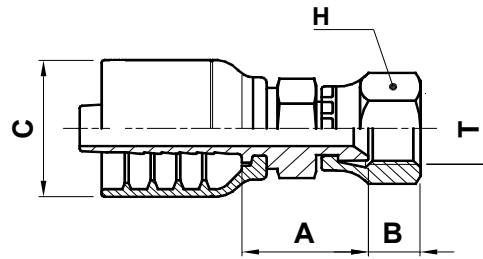
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		C		D		H		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]
F5-0404-JFS90M	04	3/16	5	7/16"-20	1.17	27.2	0.34	8.7	0.82	21	1.14	29	0.55	9/16	14
F5-0606-JFS90M	06	5/16	8	9/16"-18	1.05	26.8	0.37	9.5	0.94	24	0.90	23	0.75	3/4	19
F5-0808-JFS90M	08	13/32	10	3/4" - 16	1.37	31.35	0.40	10.3	1.06	27	1.18	30	0.87	7/8	22
F5-1212-JFS90M	12	5/8	16	1 1/16"-12	2.12	48.54	0.56	14.3	1.45	37	2.16	45.5	1.26	1 1/4	32
F5-1616-JFS90M	16	7/8	22	1 5/16"-12	3.12	79.5	0.64	16.3	1.69	43	2.79	71	1.50	1 1/2	38



F5-SFS

SAE Female Swivel



USE WITH TEXCEL HOSE SERIES

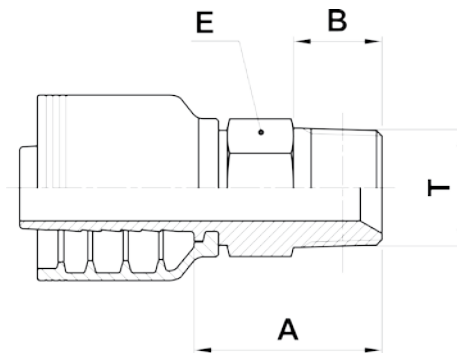
HBR5, HBHTR5

ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		C			E		H		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]	[in]	[in]	[mm]
F5-0606-SFS	06	5/16	8	5/8"-18	0.95	24	0.43	10.8	0.94	24	0.748	3/4	19	0.87	7/8	22

F4-PM

NPT Male

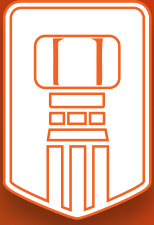


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

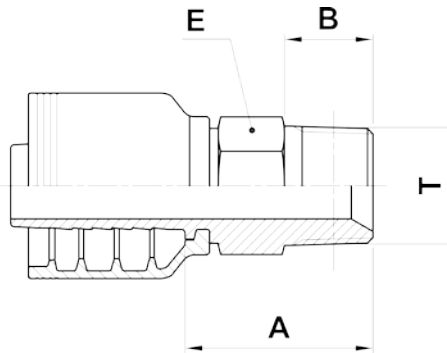
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-PM	08	1/2	12	1/2" - 14	1.41	35.7	0.75	19	0.87	7/8	22
F4-1212-PM	12	3/4	19	3/4" - 14	1.69	43	0.75	19	1.06	1 1/16	27
F4-1612-PM	16	1	25	3/4" - 14	1.74	44.1	0.75	19	1.26	1 1/4	32
F4-1616-PM	16	1	25	1" - 11 1/2	1.89	48	0.94	24	1.42	1 7/16	36
F4-2020-PM	20	1 1/4	31	1 1/4" - 11 1/2	2.48	62.9	0.96	24.5	1.81	1 13/16	46
F4-2424-PM	24	1 1/2	38	1 1/2" - 11 1/2	2.52	64	1.00	25.5	1.97	2	50
F4-3232-PM	32	2	51	2" - 11 1/2	3.02	76.7	1.02	26	2.56	2 9/16	65



F4-PM-S

NPT Male Stainless Steel



USE WITH TEXCEL HOSE SERIES

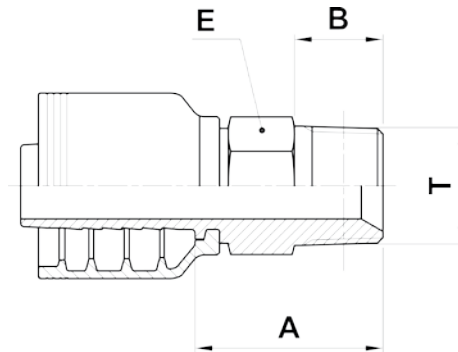
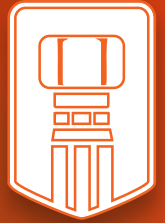
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

Code	Hose			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]
F4-1212-PM-S	12	¾	19	¾" - 14	1.63	41.3	0.75	19	1.06	1 ⅛	27
F4-1616-PM-S	16	1	25	1" - 11½	1.89	48	0.94	24	1.42	1 ⅞	36
F4-2020-PM-S	20	1 ¼	31	1 ¼" - 11 ½	2.48	62.9	0.96	24.5	1.81	1 13/16	46
F4-2424-PM-S	24	1 ½	38	1 ½" - 11 ½	2.52	64	1.00	25.5	1.97	2	50
F4-3232-PM-S	32	2	51	2" - 11 ½	3.02	76.7	1.02	26	2.56	2 9/16	65

F4-PM-X

NPT API Male Extended

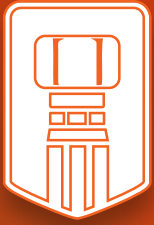


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

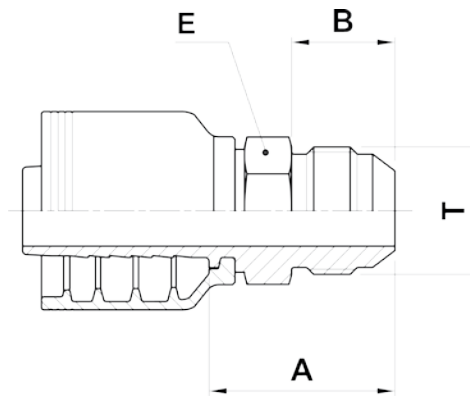
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-3232-PM-X	32	2	51	2" - 11 1/2	4.37	111	2.01	51	2.56	2 9/16	65



F4-JM

JIC Male



USE WITH TEXCEL HOSE SERIES

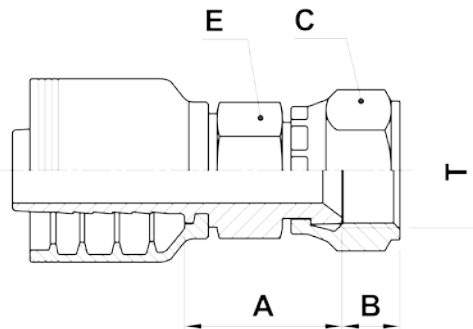
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-JM	08	1/2	12	3/4" - 16	1.27	32.2	0.66	16.7	0.75	3/4	19
F4-0810-JM	08	1/2	12	7/8" - 14	1.41	35.7	0.76	19.3	0.95	15/16	24
F4-1212-JM	12	3/4	19	1 1/16" - 12	1.61	40.9	0.86	21.9	1.06	1 1/16	27
F4-1216-JM	12	3/4	19	1 5/16" - 12	1.85	47.1	0.91	23.1	1.42	1 7/16	36
F4-1616-JM	16	1	25	1 5/16" - 12	1.85	47.1	0.91	23.1	1.42	1 7/16	36
F4-2020-JM	20	1 1/4	31	1 5/8" - 12	2.47	62.7	0.96	24.3	1.81	1 13/16	46
F4-2424-JM	24	1 1/2	38	1 7/8" - 12	2.60	66	1.08	27.5	1.97	2	50
F4-3232-JM	32	2	51	2 1/2" - 12	3.33	84.6	1.33	33.9	2.56	2 9/16	65

F4-JFS

JIC Female Swivel

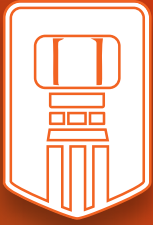


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

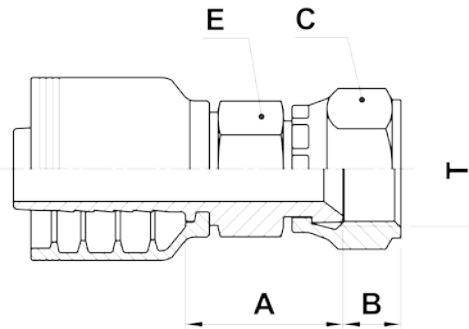
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C		E	C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]	[in]	[mm]	[mm]
F4-0808-JFS	08	½	12	¾" - 16	1.11	28.2	0.42	10.7	0.75	¾	19	0.87	⅞	22
F4-0810-JFS	08	½	12	⅞" - 14	1.17	29.7	0.50	12.7	0.87	⅞	22	1.06	1 ⅛	27
F4-0812-JFS	08	½	12	1 ⅛" - 12	1.43	36.3	0.56	14.3	1.06	1 ⅛	27	1.26	1 ¼	32
F4-1010-JFS	10	⅝	16	⅞" - 14	1.17	29.8	0.50	12.7	0.87	⅞	22	1.06	1 ⅛	27
F4-1012-JFS	10	⅝	16	1 ⅛" - 12	1.34	34	0.56	14.3	1.06	1 ⅛	27	1.26	1 ¼	32
F4-1210-JFS	12	¾	19	⅞" - 14	1.49	37.8	0.50	12.7	1.06	1 ⅛	27	1.06	1 ⅛	27
F4-1212-JFS	12	¾	19	1 ⅛" - 12	1.41	36	0.54	13.8	1.06	1 ⅛	27	1.26	1 ¼	32
F4-1214-JFS	12	¾	19	1 ¾" - 12	1.48	37.5	0.61	15.4	1.18	1 ¾	30	1.42	1 ⅞	36
F4-1216-JFS	12	¾	19	1 ⅝" - 12	1.48	37.5	0.63	16	1.26	1 ¾	32	1.50	1 ½	38
F4-1612-JFS	16	1	25	1 ⅛" - 12	1.50	38	0.56	14.3	1.26	1 ¾	32	1.26	1 ¼	32
F4-1616-JFS	16	1	25	1 ⅝" - 12	1.40	35.5	0.64	16.3	1.26	1 ¾	32	1.50	1 ½	38
F4-1620-JFS	16	1	25	1 ⅝" - 12	2.07	52.6	0.63	16	1.61	1 ⅝	41	1.97	2	50
F4-2020-JFS	20	1 ¼	31	1 ⅝" - 12	2.03	51.5	0.63	16	1.61	1 ⅝	41	1.97	2	50
F4-2024-JFS	20	1 ¼	31	1 ⅞" - 12	2.24	56.8	0.73	18.5	1.97	2	50	2.17	2 ⅜	55
F4-2424-JFS	24	1 ½	38	1 ⅞" - 12	2.24	56.9	0.73	18.5	1.97	2	50	2.17	2 ⅜	55
F4-3232-JFS	32	2	51	2 ½" - 12	2.91	74	0.94	24	2.56	2 ⅞	65	2.95	2 ⅝	75



F4-JFS-S

JIC Female Swivel Stainless Steel



USE WITH TEXCEL HOSE SERIES

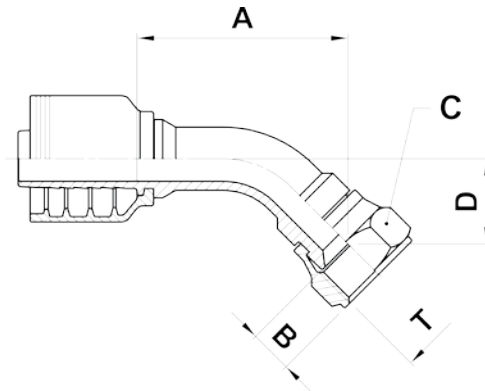
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
F4-1212-JFS-S	12	3/4	19	1 1/16" - 12	1.41	36	0.54	13.8	1.06	1 1/16	27	1.26	1 1/4	32
F4-1616-JFS-S	16	1	25	1 5/16" - 12	1.40	35.5	0.64	16.3	1.26	1 1/4	32	1.45	1 1/2	38
F4-2020-JFS-S	20	1 1/4	31	1 5/8" - 12	2.03	51.5	0.63	16	1.61	1 5/8	41	1.97	2	50
F4-2424-JFS-S	24	1 1/2	38	1 7/8" - 12	2.24	56.9	0.73	18.5	1.97	2	50	2.17	2 3/16	55
F4-3232-JFS-S	32	2	51	2 1/2" - 12	2.91	74	0.94	24	2.56	2 9/16	65	2.95	2 15/16	75

F4-JFS45M

JIC Female Swivel 45° Bent Tube Medium Drop

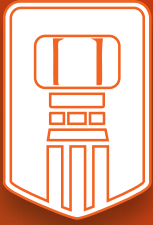


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

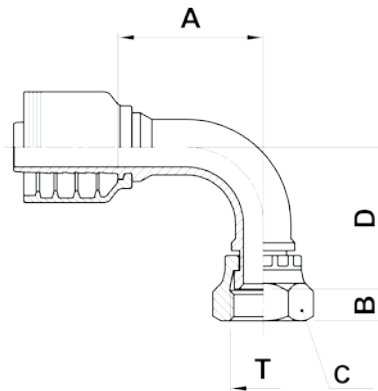
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-JFS45M	08	1/2	12	3/4" - 16	1.73	44	0.42	10.7	0.54	13.8	0.87	7/8	22
F4-1010-JFS45M	10	5/8	16	7/8" - 14	2.42	61.5	0.50	12.7	0.97	24.8	1.06	1 1/16	27
F4-1012-JFS45M	10	5/8	16	1 1/16" - 12	2.38	60.5	0.54	13.8	1.14	29.0	1.26	1 1/4	32
F4-1212-JFS45M	12	3/4	19	1 1/16" - 12	2.66	67.44	0.56	14.3	1.06	26.9	1.26	1 1/4	32
F4-1216-JFS45M	12	3/4	19	1 5/16" - 12	2.75	29.9	0.64	16.3	1.19	30.4	1.50	1 1/2	38
F4-1616-JFS45M	16	1	25	1 5/16" - 12	3.31	84	0.63	16	1.26	32	1.50	1 1/2	38
F4-2020-JFS45M	20	1 1/4	31	1 5/8" - 12	3.90	99	.63	16	1.48	37.5	1.97	2	50
F4-2424-JFS45M	24	1 1/2	38	1 7/8" - 12	5.21	132.4	0.73	18.5	2.03	51.5	2.17	2 3/16	55
F4-3232-JFS45M	32	2	51	2 1/2" - 12	6.01	152.6	0.94	24	2.71	68.8	2.95	2 15/16	75



F4-JFS90M

JIC Female Swivel 90° Bent Tube Medium Drop



USE WITH TEXCEL HOSE SERIES

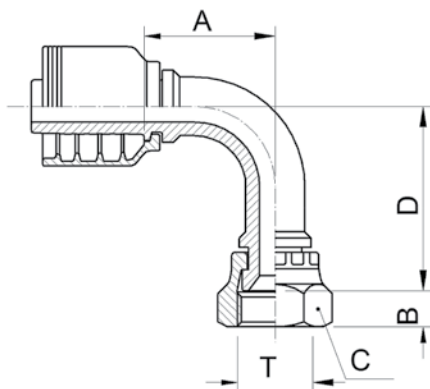
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-JFS90M	08	½	12	¾" - 16	1.65	41.8	0.42	10.7	1.18	30	0.87	⅞	22
F4-0810-JFS90M	08	½	12	⅞" - 14	1.44	36.8	0.49	12.5	1.59	40.5	1.06	1 ⅛	27
F4-1010-JFS90M	10	⅝	16	⅞" - 14	2.13	54	0.50	12.7	2.05	52	1.06	1 ⅛	27
F4-1012-JFS90M	10	⅝	16	1 ⅛" - 12	2.13	54	0.54	13.8	2.16	55	1.26	1 ¼	32
F4-1212-JFS90M	12	¾	19	1 ⅛" - 12	2.18	55.5	0.56	14.3	2.16	55	1.26	1 ¼	32
F4-1216-JFS90M	12	¾	19	1 ⅝" - 12	2.18	55.5	0.64	16.3	2.36	60	1.50	1 ½	38
F4-1616-JFS90M	16	1	25	1 ⅝" - 12	2.83	72	0.63	16	2.80	71	1.50	1 ½	38
F4-2020-JFS90M	20	1 ¼	31	1 ⅝" - 12	3.41	86.5	0.63	16	3.03	77	1.97	2	50
F4-2424-JFS90M	24	1 ½	38	1 ⅞" - 12	4.49	114	0.73	18.5	4.25	108	2.17	2 ⅜	55
F4-3232-JFS90M	32	2	51	2 ½" - 12	5.14	130.5	0.94	24	5.51	140	2.95	2 ⅝	75

F4-JFS90L

JIC Female Swivel 90° Bent Tube Long Drop

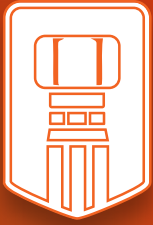


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

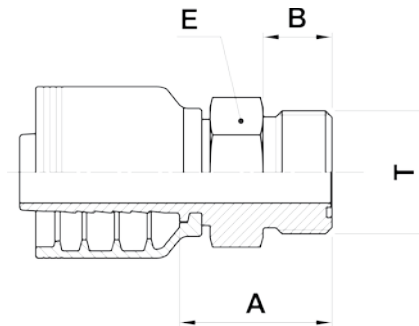
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1212-JFS90L	12	¾	19	1 ¼" - 12	2.16	55	0.56	14.3	3.74	95	1.26	1 ¼	32
F4-1616-JFS90L	16	1	25	1 ½" - 12	2.95	75	0.63	16	4.33	110	1.50	1 ½	38
F4-2020-JFS90L	20	1 ¼	31	1 ¾" - 12	3.41	86.5	0.63	16	4.33	110	1.97	2	50



F4-OM

ORFS Male



USE WITH TEXCEL HOSE SERIES

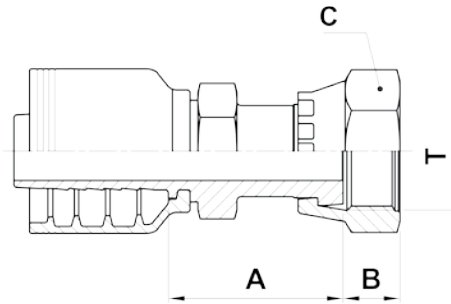
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]
F4-0808-OM	08	½	12	1 3/16" - 16	1.19	30.2	0.50	12.8	0.87	7/8	22
F4-1212-OM	12	¾	19	1 3/16" - 12	1.47	37.5	0.67	17	1.26	1 ¼	32
F4-1616-OM	16	1	25	1 7/16" - 12	1.63	41.5	0.69	17.5	1.61	1 5/8	41
F4-2020-OM	20	1 ¼	31	1 11/16" - 12	1.79	45.4	0.69	17.5	1.81	1 13/16	46

F4-OFS

ORFS Female Swivel

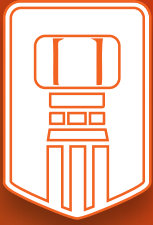


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

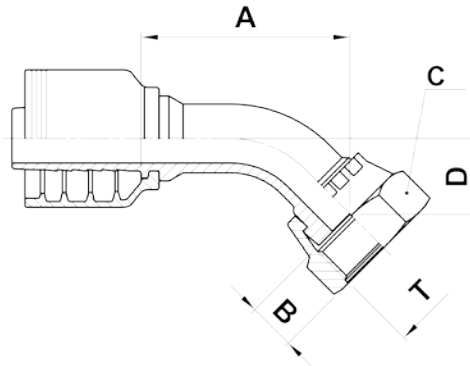
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E			C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	↗[in]	[mm]	[in]	↗[in]	[mm]
F4-0808-OFS	08	½	12	1 3/16" - 16	1.45	37	0.43	11	0.75	¾	19	0.95	1 5/16	24
F4-0810-OFS	08	½	12	1" - 14	1.56	39.7	0.53	13.5	0.95	1 5/16	24	1.18	1 ¾	30
F4-0812-OFS	08	½	12	1 3/16" - 12	1.76	44.7	0.57	14.5	1.18	1 ¾	30	1.42	1 7/16	36
F4-1010-OFS	10	5/8	16	1" - 14	1.54	39.1	0.53	13.5	0.95	1 5/16	24	1.18	1 ¾	30
F4-1012-OFS	10	5/8	16	1 3/16" - 12	1.73	44	0.57	14.5	1.18	1 ¾	30	1.42	1 7/16	36
F4-1212-OFS	12	¾	19	1 3/16" - 12	1.75	44.5	0.57	14.5	1.18	1 ¾	30	1.42	1 7/16	36
F4-1216-OFS	12	¾	19	1 7/16" - 12	2.03	51.5	0.58	14.8	1.42	1 7/16	36	1.61	1 5/8	41
F4-1612-OFS	16	1	25	1 3/16" - 12	2.01	51	0.57	14.5	1.42	1 7/16	36	1.42	1 7/16	36
F4-1616-OFS	16	1	25	1 7/16" - 12	2.09	53	0.58	14.8	1.42	1 7/16	36	1.61	1 5/8	41
F4-1620-OFS	16	1	25	1 11/16" - 12	2.17	55	0.58	14.8	1.61	1 5/8	41	1.97	2	50
F4-2020-OFS	20	1 ¼	31	1 11/16" - 12	2.32	59	0.58	14.8	1.61	1 5/8	41	1.97	2	50
F4-2424-OFS	24	1 ½	38	2" - 12	2.41	61.2	0.58	14.8	1.97	2	50	2.36	2 ¾	60



F4-OFS45M

ORFS Female Swivel 45° Bent Tube Medium Drop



USE WITH TEXCEL HOSE SERIES

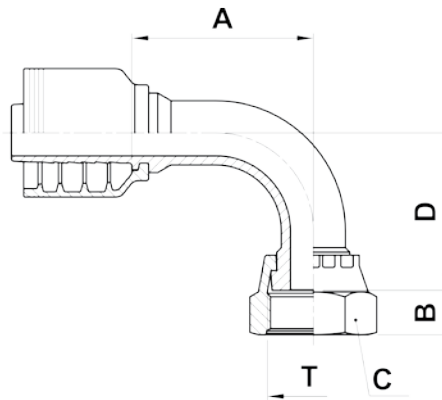
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE				THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN	[in]		[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	
F4-0808-OFS45M	08	½	12	13⁄16" - 16	2.22	56.5	0.43	11	0.55	14	0.95	15⁄16	24	
F4-1010-OFS45M	10	5⁄8	16	1" - 14	2.34	59.5	0.53	13.5	0.80	20.3	1.18	1 3⁄16	30	
F4-1012-OFS45M	10	5⁄8	16	1 3⁄16" - 12	2.38	60.5	0.57	14.5	0.91	23.2	1.42	1 7⁄16	36	
F4-1212-OFS45M	12	¾	19	1 3⁄16" - 12	2.38	60.4	0.57	14.5	0.86	21.9	1.42	1 7⁄16	36	
F4-1616-OFS45M	16	1	25	1 7⁄16" - 12	2.98	75.7	0.58	14.8	1.07	27.2	1.61	1 5⁄8	41	
F4-2020-OFS45M	20	1 ¼	31	1 1⁄16" - 12	3.90	99	0.58	14.8	1.48	37.5	1.97	2	50	
F4-2424-OFS45M	24	1 ½"	38	2" - 12	4.91	124.6	0.58	14.8	1.86	47.2	2.36	2 3⁄8"	60	

F4-OFS90M

ORFS Female Swivel 90° Bent Tube Medium Drop

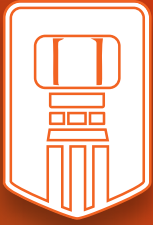


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

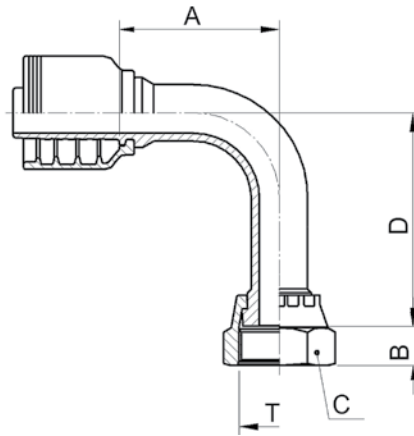
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-OFS90M	08	1/2	12	1 3/16" - 16	1.70	43.3	0.43	11	1.18	30	0.95	15/16	24
F4-0810-OFS90M	08	1/2	12	1" - 14	1.65	41.8	0.53	13.5	1.47	37.4	1.18	1 3/16	30
F4-1010-OFS90M	10	5/8	16	1" - 14	2.11	53.5	0.53	13.5	1.73	44	1.18	1 3/16	30
F4-1012-OFS90M	10	5/8	16	1 3/16" - 12	2.11	53.5	0.57	14.5	1.89	48	1.42	1 7/16	36
F4-1212-OFS90M	12	3/4	19	1 3/16" - 12	2.24	57	0.55	14	1.89	48	1.42	1 7/16	36
F4-1216-OFS90M	12	3/4	19	1 7/16" - 12	2.24	57	0.54	13.7	1.97	50	1.61	1 5/8	41
F4-1616-OFS90M	16	1	25	1 7/16" - 12	2.72	69	0.58	14.8	2.32	59	1.61	1 5/8	41
F4-2020-OFS90M	20	1 1/4	31	1 11/16" - 12	3.41	86.5	0.58	14.8	3.03	77	1.97	2	50
F4-2424-OFS90M	24	1 1/2	38	2" - 12	4.13	105	0.58	14.8	3.70	94	2.36	2 3/8	60



F4-OFS90L

ORFS Female Swivel 90° Bent Tube Long Drop



USE WITH TEXCEL HOSE SERIES

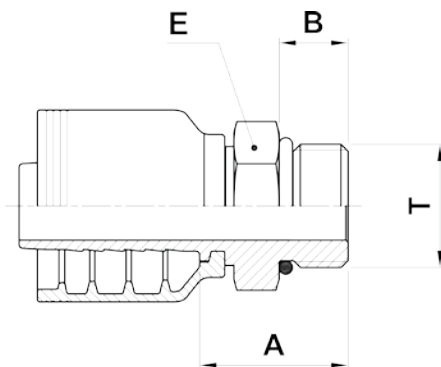
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1212-OFS90L	12	3/4	19	1 3/16" - 12	2.24	57	0.55	14	3.78	96	1.42	1 7/16	36
F4-1616-OFS90L	16	1	25	1 7/16" - 12	2.77	70.3	0.58	13.7	4.49	114	1.61	1 5/8	41
F4-2020-OFS90L	20	1 1/4	31	1 11/16" - 12	3.41	86.5	0.58	14.8	5.08	129	1.97	2	50

F4-OBM

O-RING Boss Male

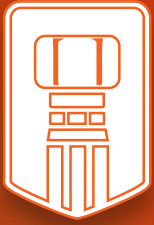


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

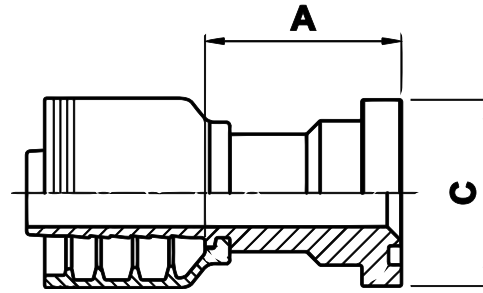
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1212-OBM	12	3/4	19	1 1/16" - 12	1.27	34.5	0.59	15.1	1.26	1 1/4	32
F4-1616-OBM	16	1	25	1 5/16" - 12	1.54	39.1	0.59	15.1	1.50	1 1/2	38



F4-FL

Code 61 Flange



USE WITH TEXCEL HOSE SERIES

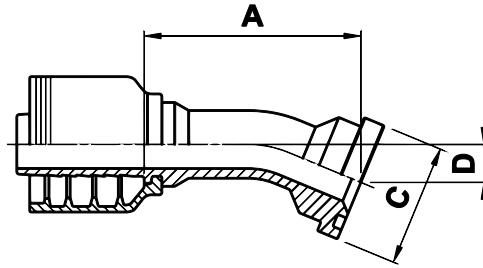
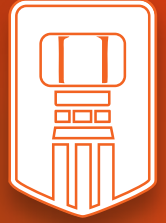
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]
F4-0808-FL	08	½	12	½"	1.52	38.7	1.19	30.2
F4-0812-FL	08	½	12	¾"	1.56	39.7	1.50	38
F4-1212-FL	12	¾	19	¾"	1.56	39.5	1.50	38
F4-1216-FL	12	¾	19	1"	1.81	46	1.75	44.4
F4-1616-FL	16	1	25	1"	1.87	47.5	1.75	44.4
F4-1620-FL	16	1	25	1 ¼"	1.91	48.5	1.75	44.4
F4-2016-FL	20	1 ¼	31	1"	2.02	51.4	1.75	44.5
F4-2020-FL	20	1 ¼	31	1 ¼"	2.02	51.4	2.00	50.8
F4-2024-FL	20	1 ¼	31	1 ½"	2.16	54.9	2.37	60.3
F4-2424-FL	24	1 ½	38	1 ½"	2.09	53	2.37	60.3
F4-2432-FL	24	1 ½	38	2"	2.93	74.5	2.81	71.4
F4-3232-FL	32	2	51	2"	3.00	76.2	2.81	71.4

F4-FL22.5

Code 61 Flange 22.5° Bend

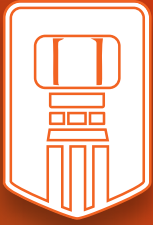


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

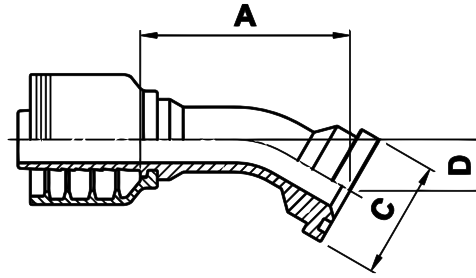
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FL22.5	12	¾	19	¾"	2.71	68.9	1.50	38	0.50	12.7
F4-1216-FL22.5	12	¾	19	1"	2.60	65.9	1.75	44.4	0.52	13.3
F4-1616-FL22.5	16	1	25	1"	2.83	72	1.75	44.4	0.45	11.5
F4-1620-FL22.5	16	1	25	1 ¼"	2.91	74	2.00	50.8	0.50	12.6
F4-2424-FL22.5	24	1 ½	38	1 ½"	3.90	99	2.37	60.3	0.63	16
F4-3232-FL22.5	32	2	51	2"	5.78	146.7	2.81	71.4	0.91	23



F4-FL30

Code 61 Flange 30° Bend



USE WITH TEXCEL HOSE SERIES

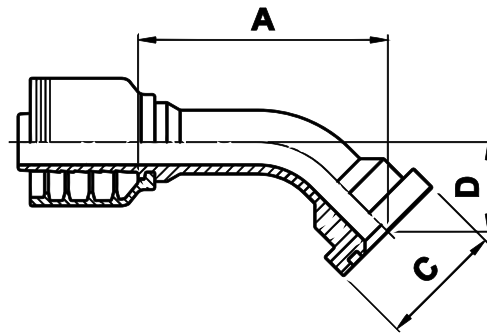
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FL30	12	3/4	19	3/4"	2.70	68.7	1.50	38	0.69	17.6
F4-1616-FL30	16	1	25	1"	3.03	77	1.75	44.4	0.65	16.5

F4-FL45

Code 61 Flange 45° Bend

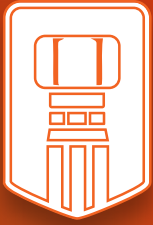


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

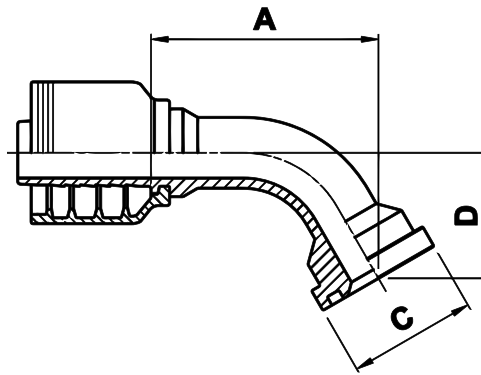
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-0808-FL45	08	½	12	½"	2.20	56	1.19	30.2	0.89	22.6
F4-0812-FL45	08	½	12	¾"	2.55	64.7	1.50	38	1.03	26.1
F4-1212-FL45	12	¾	19	¾"	2.70	68.5	1.50	38	1.10	27.9
F4-1216-FL45	12	¾	19	1"	2.77	70.5	1.75	44.4	1.14	29
F4-1616-FL45	16	1	25	1"	2.93	74.4	1.75	44.4	1.06	27
F4-1620-FL45	16	1	25	1 ¼"	3.00	76.2	2.00	50.8	1.14	29
F4-2020-FL45	20	1 ¼	31	1 ¼"	3.50	89	2.00	50.8	1.22	31
F4-2024-FL45	20	1 ¼	31	1 ½"	3.61	91.8	2.37	60.3	1.22	31
F4-2424-FL45	24	1 ½	38	1 ½"	3.94	100	2.37	60.3	1.44	36.5
F4-2432-FL45	24	1 ½	38	2"	4.13	105	2.81	71.4	1.44	36.5
F4-3232-FL45	32	2	51	2"	5.60	142.3	2.81	71.4	2.09	53
F4-3240-FL45	32	2	51	2 ½"	6.46	164	3.31	84.1	2.40	61



F4-FL60

Code 61 Flange 60° Bend



USE WITH TEXCEL HOSE SERIES

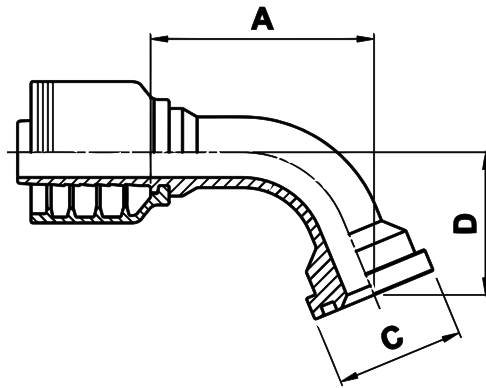
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FL60	12	¾	19	¾"	2.73	69.3	1.50	38	1.51	38.3
F4-1616-FL60	16	1	25	1"	3.10	78.7	1.75	44.4	1.58	40
F4-1620-FL60	16	1	25	1 ¼"	3.31	84	2.00	50.8	1.57	40
F4-2020-FL60	20	1 ¼	31	1 ¼"	3.85	97.8	2.00	50.8	1.73	44

F4-FL67.5

Code 61 Flange 67.5° Bend

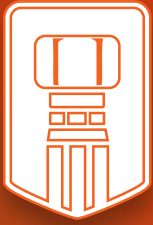


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

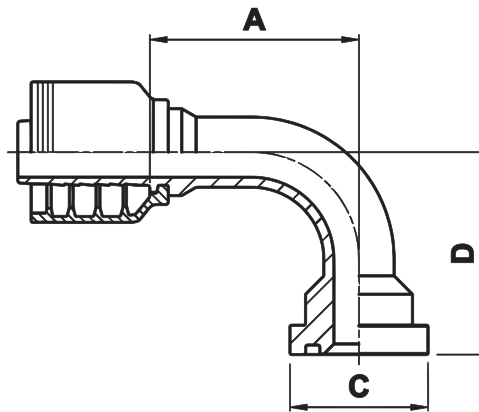
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	DN	INCH	SIZE		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FL67.5	12	¾	19	¾"	2.47	62.8	1.50	38	1.60	40.6
F4-1216-FL67.5	12	¾	19	1"	2.54	64.5	1.75	44.4	1.76	44.7
F4-1616-FL67.5	16	1	25	1"	2.99	76	1.75	44.4	1.81	46
F4-1620-FL67.5	16	1	25	1 ¼"	3.19	81	2.00	50.8	1.80	45.6
F4-2020-FL67.5	20	1 ¼	31	1 ¼"	3.37	85.6	2.00	50.8	1.97	50
F4-2424-FL67.5	24	1 ½	38	1 ½"	4.27	108.5	2.37	60.3	2.34	59.5



F4-FL90

Code 61 Flange 90° Bend



USE WITH TEXCEL HOSE SERIES

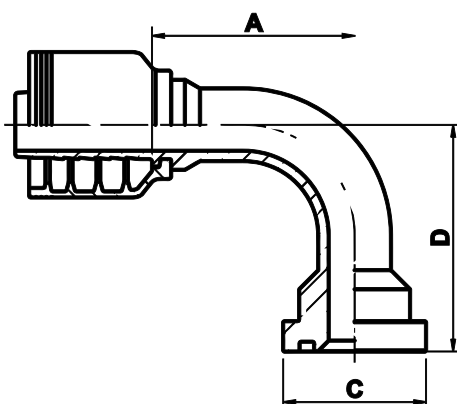
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	DN	INCH	SIZE		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-0808-FL90	08	½	12	½"	2.00	50.8	1.19	30.2	1.77	45
F4-0812-FL90	08	½	12	¾"	2.00	50.8	1.50	38	1.97	50
F4-1212-FL90	12	¾	19	¾"	2.19	55.5	1.50	38	2.22	56.5
F4-1216-FL90	12	¾	19	1"	2.19	55.5	1.75	44.4	2.28	58
F4-1616-FL90	16	1	25	1"	2.76	70	1.75	44.4	2.40	61
F4-1620-FL90	16	1	25	1 ¼"	2.75	69.9	2.00	50.8	2.40	61
F4-2020-FL90	20	1 ¼	31	1 ¼"	3.43	87	2.00	50.8	2.72	69.2
F4-2024-FL90	20	1 ¼	31	1 ½"	3.43	87	2.37	60.3	2.72	69.2
F4-2424-FL90	24	1 ½	38	1 ½"	4.09	104	2.37	60.3	3.19	81
F4-2432-FL90	24	1 ½	38	2"	4.02	102	2.81	71.4	3.35	85
F4-3224-FL90	32	2	51	1 ½"	4.53	115	2.38	60.4	3.19	81
F4-3232-FL90	32	2	51	2"	5.21	132.3	2.81	71.4	4.84	123
F4-3240-FL90	32	2	51	2 ½"	5.59	142	3.31	84.1	5.20	132

F4-FL90L

Code 61 Flange 90° Long Bend

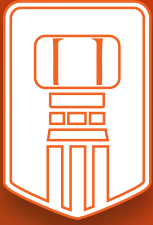


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

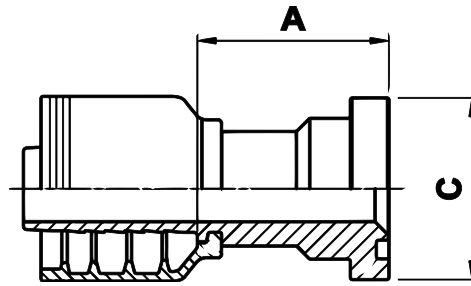
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FL90L95	12	3/4	19	3/4"	2.45	62.2	1.50	38	3.74	95
F4-1616-FL90L120	16	1	25	1"	2.76	70	1.75	44.4	4.72	120



F4-FLH

Code 62 Flange



USE WITH TEXCEL HOSE SERIES

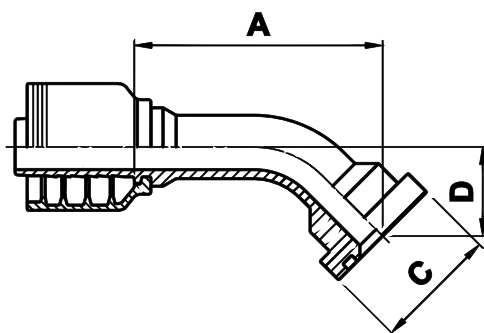
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		FLANGE	A		C	
		INCH	DN		[in]	[mm]	[in]	[mm]
F4-0808-FLH	08	1/2	12	1/2"	1.56	39.7	1.25	31.7
F4-1212-FLH	12	3/4	19	3/4"	1.71	43.5	1.63	41.3
F4-1216-FLH	12	3/4	19	1"	2.32	59	1.88	47.6
F4-1612-FLH	16	1	25	3/4"	2.20	56	1.63	41.3
F4-1616-FLH	16	1	25	1"	2.38	60.5	1.88	47.6
F4-1620-FLH	16	1	25	1 1/4"	2.66	67.5	2.13	54
F4-2016-FLH	20	1 1/4	31	1"	2.65	67.4	1.87	47.6
F4-2020-FLH	20	1 1/4	31	1 1/4"	2.83	71.9	2.13	54
F4-2024-FLH	20	1 1/4	31	1 1/2"	3.20	81.4	2.50	63.5
F4-2424-FLH	24	1 1/2	38	1 1/2"	2.99	76	2.50	63.5
F4-3232-FLH	32	2	51	2"	3.48	88.5	3.13	79.4

F4-FLH45

Code 62 Flange 45° Bend

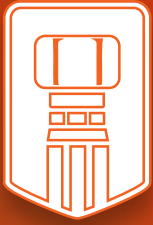


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

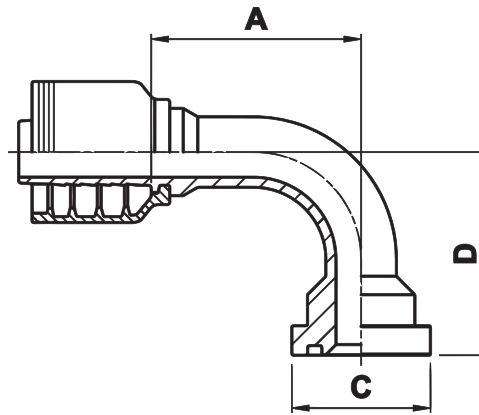
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	SDN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FLH45	12	¾	19	¾"	2.70	68.7	1.63	41.3	1.10	27.9
F4-1216-FLH45	12	¾	19	1"	2.94	74.7	1.9	47.6	1.33	33.9
F4-1616-FLH45	16	1	25	1"	3.11	78.9	1.88	47.6	1.21	30.8
F4-1620-FLH45	16	1	25	1 ¼"	3.74	95	2.13	54	1.54	39
F4-2020-FLH45	20	1 ¼	31	1 ¼"	4.55	115.5	2.13	54	1.72	43.8
F4-2024-FLH45	20	1 ¼	31	1 ½"	4.63	117.5	2.50	63.5	1.89	48
F4-2424-FLH45	24	1 ½	38	1 ½"	4.96	126	2.50	63.5	1.85	47
F4-3232-FLH45	32	2	51	2"	6.65	169	3.13	79.4	2.40	61



F4-FLH90

Code 62 Flange 90° Bend



USE WITH TEXCEL HOSE SERIES

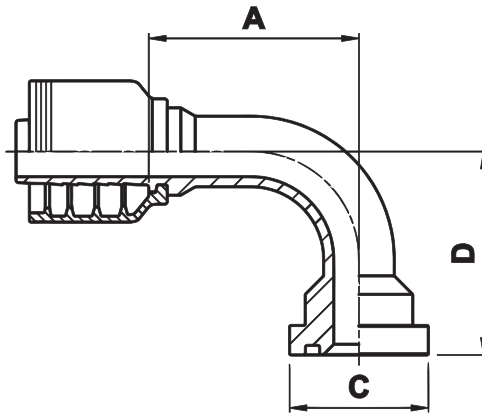
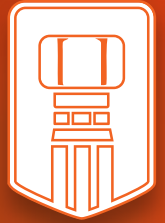
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-0808-FLH90	08	½	12	½"	1.96	49.7	1.25	31.7	1.85	47
F4-1212-FLH90	12	¾	19	¾"	2.19	55.5	1.63	41.3	2.22	56.5
F4-1216-FLH90	12	¾	19	1"	2.19	55.5	1.88	47.6	2.56	65
F4-1616-FLH90	16	1	25	1"	2.99	76	1.88	47.6	2.60	66
F4-1620-FLH90	16	1	25	1 ¼"	3.09	78.5	2.13	54	3.13	79.5
F4-2020-FLH90	20	1 ¼	31	1 ¼"	4.09	104	2.13	54	3.39	86
F4-2024-FLH90	20	1 ¼	31	1 ½"	4.10	104.2	2.50	63.5	3.86	98
F4-2424-FLH90	24	1 ½	38	1 ½"	4.37	111	2.50	63.5	4.09	104
F4-3232-FLH90	32	2	51	2"	5.88	149.3	3.13	79.4	5.28	134

F4-FLH90L

Code 62 Flange 90° Bend Long Drop

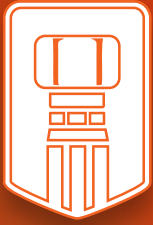


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

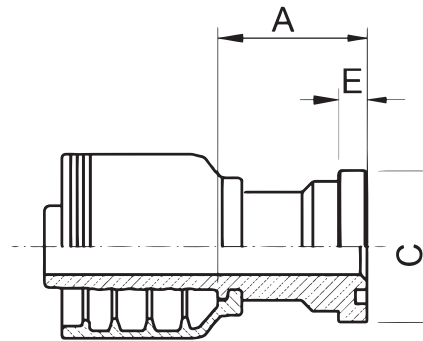
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1616-FLH90L120	16	1	25	1"	2.95	75	1.9	47.6	4.72	120



F4-FLHC

Code 62 CAT Flange



USE WITH TEXCEL HOSE SERIES

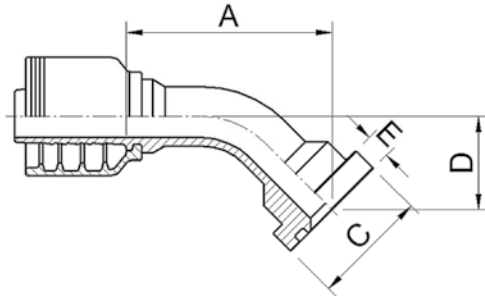
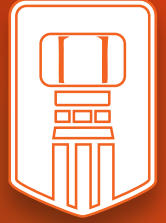
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		FLANGE	A		C		E	
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FLHC	12	3/4	19	3/4"	1.95	49.5	1.63	41.3	0.57	14.5
F4-1216-FLHC	12	3/4	19	1"	2.51	64	1.87	47.6	0.57	14.5
F4-1616-FLHC	16	1	25	1"	2.58	65.5	1.87	47.6	0.57	14.5
F4-1620-FLHC	16	1	25	1 1/4"	2.87	73	2.13	54	0.57	14.5
F4-2020-FLHC	20	1 1/4"	31	1 1/4"	3.00	76.1	2.13	54	0.57	14.5

F4-FLH45C

Code 62 CAT Flange 45° Bend

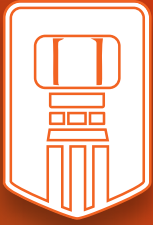


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

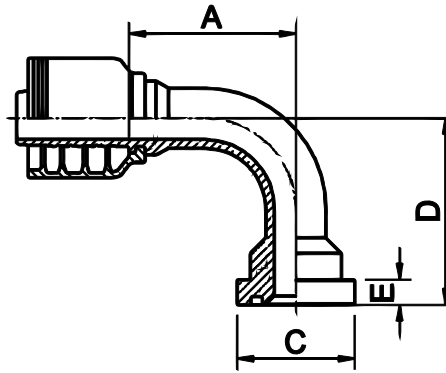
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D		E	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FLH45C	12	3/4	19	3/4"	3.36	85.4	1.63	41.3	1.27	32.5	0.57	14.5
F4-1216FLH45C	12	3/4"	19	1"	3.18	80.7	1.87	47.6	1.48	37.5	0.57	14.5
F4-1616-FLH45C	16	1	25	1"	3.24	82.2	1.87	47.6	1.36	34.7	0.57	14.5
F4-1620-FLH45C	16	1	25	1 1/4"	3.67	93.2	2.13	54	1.65	41.9	0.57	14.5
F4-2020-FLH45C	20	1 1/4	31	1 1/4"	4.67	118.5	2.13	54	1.83	46.5	0.57	14.5



F4-FLH90C

Code 62 CAT Flange 90° Bend



USE WITH TEXCEL HOSE SERIES

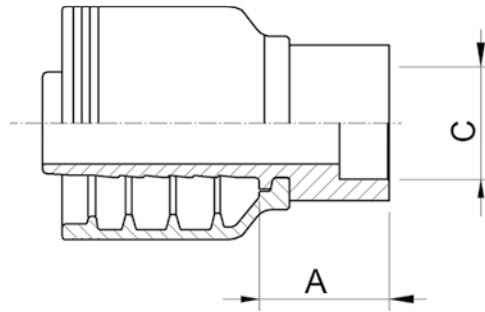
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D		E	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]
F4-1212-FLH90C	12	3/4	19	3/4"	2.19	55.5	1.63	41.3	2.44	62	0.57	14.5
F4-1216-FLH90C	12	3/4	19	1"	2.19	55.5	1.88	47.6	2.76	70	0.57	14.5
F4-1616-FLH90C	16	1	25	1"	2.98	75.6	1.87	47.6	2.80	71	0.57	14.5
F4-1620-FLH90C	16	1	25	1 1/4"	2.94	74.6	2.13	54	3.31	84	0.57	14.5
F4-2020-FLH90C	20	1 1/4	31	1 1/4"	4.09	104	2.13	54	3.55	90.2	0.57	14.5

F4-BRF

Braze Female Solid

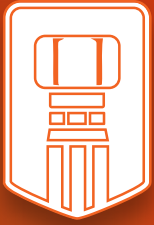


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

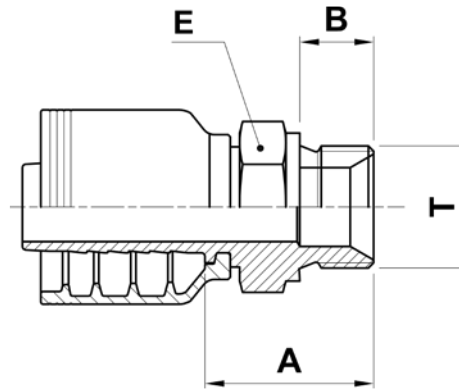
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			A		C	
	SIZE	INCH	DN	[in]	[mm]	[in]	[mm]
F4-1212-BRF	12	3/4	19	0.79	20	0.76	19.2
F4-1616-BRF	16	1	25	0.91	23	1.01	25.6



F4-BPM

BSPP Male



USE WITH TEXCEL HOSE SERIES

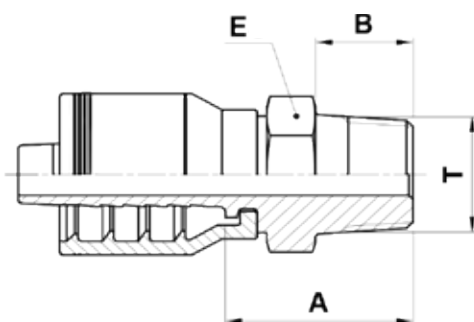
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1212-BPM	12	3/4	19	3/4" - 14	1.50	38	0.63	16	1.26	1 1/4	32
F4-1616-BPM	16	1	25	1" - 11	1.65	42	0.75	19	1.614	1 5/8	41
F4-2020-BPM	20	1 1/4	31	1 1/4" - 11	2.00	50.9	0.79	20	1.97	2	50

F4-BTM

BSP Taper Male

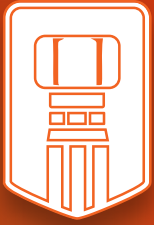


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

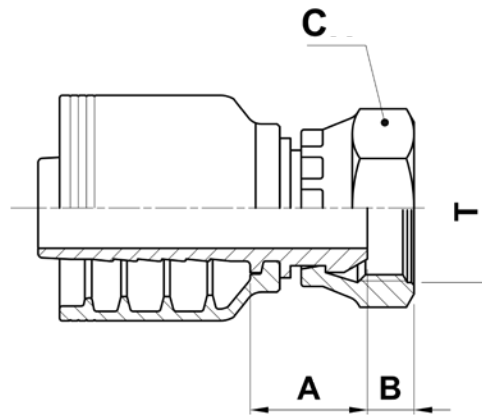
ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1212-BTM	12	3/4"	19	3/4" - 14	1.54	39	0.79	20	1.06	1 1/16"	27
F4-1616-BTM	16	1"	25	1" - 11	1.85	47	0.91	23	1.42	1 7/16"	36
F4-2020-BTM	20	1 1/4"	31	1 1/4" - 11	2.08	52.9	0.98	25	1.81	1 13/16"	46



F4-BFS

BSPP Female Swivel



USE WITH TEXCEL HOSE SERIES

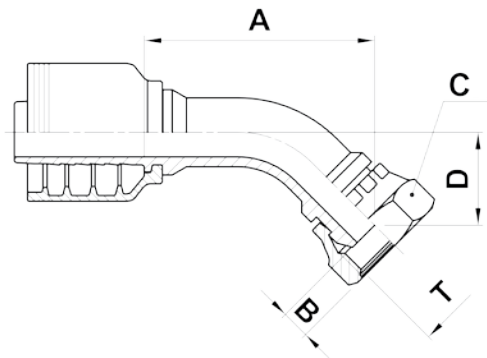
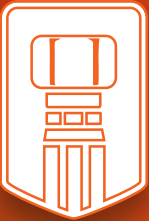
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		C		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-BFS	08	½	12	½" - 14	0.86	21.8	0.26	6.4	1.06	1 ⅛	27
F4-1212-BFS	12	¾	19	¾" - 14	0.92	23.3	0.34	8.7	1.26	1 ¼	32
F4-1616-BFS	16	1	25	1" - 11	1.12	28.5	0.41	10.5	1.50	1 ½	38
F4-2020-BFS	31	1 ¼	20	1 ¼" - 11	1.45	36.8	0.39	10	1.969	2	50
F4-2424-BFS	24	1 ½	38	1 ½" - 11	1.41	35.8	0.47	12	2.17	2 ⅜	55
F4-3232-BFS	32	2	51	2" - 11	1.48	37.6	0.63	16	2.76	2 ¾	70

F4-BSPFS45

BSP Female Swivel 45° Bent Tube

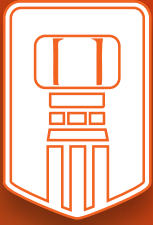


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

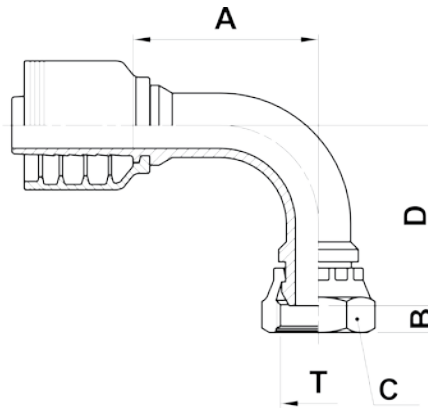
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1212-BSPFS45	12	3/4	19	3/4" - 14	2.66	67.4	0.34	8.7	1.06	26.9	1.26	1 1/4	32
F4-1616-BSPFS45	16	1	25	1" - 11	3.29	83.6	0.41	10.5	1.33	33.8	1.50	1 1/2	38



F4-BSPFS90

BSP Female Swivel 90° Bent Tube



USE WITH TEXCEL HOSE SERIES

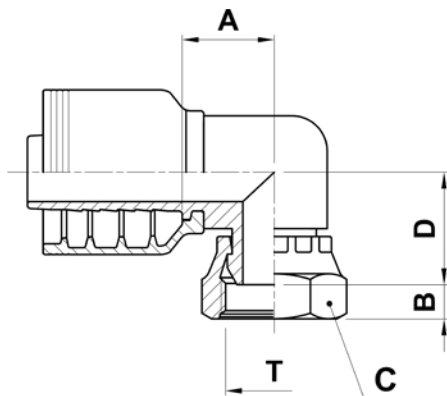
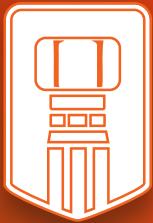
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0808-BSPFS90	08	½	12	½" - 14	1.66	42.2	0.26	6.5	1.41	36	1.06	1 ⅛	27
F4-1212-BSPFS90	12	¾	19	¾" - 14	2.18	55.5	0.34	8.7	2.17	55	1.26	1 ¼	32
F4-1616-BSPFS90	16	1	25	1" - 11	2.83	72	0.41	10.5	2.80	71	1.50	1 ½	38
F4-2020-BSPFS90	20	1 ¼	31	1 ¼" - 11	3.41	86.5	0.39	10	3.03	77	1.97	2	50
F4-2424-BSPFS90	24	1 ½	38	1 ½" - 11	4.49	114	0.47	12	4.25	108	2.17	2 ¾	55

F4-BSPFS90-B

BSP Female Swivel 90° Bent Tube - Block Style

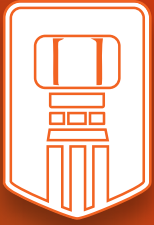


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

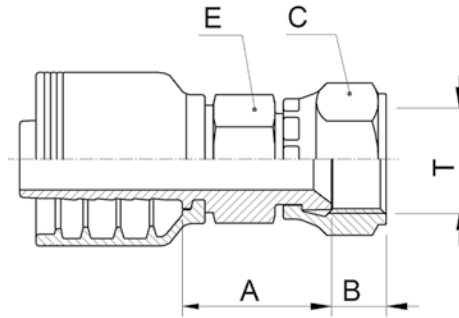
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	↗[in] [mm]
F4-1212-BSPFS90-B	12	3/4"	19	3/4" - 14	1.12	28.5	0.34	8.7	1.29	32.8	1.26	1 1/4" 32



F4-DLFS

X 2 DKOL Female Swivel



USE WITH TEXCEL HOSE SERIES

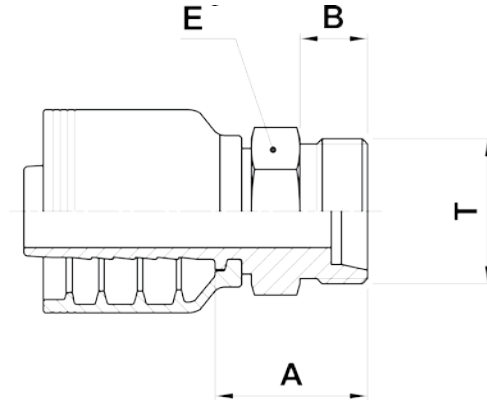
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	PIPE	A		B		E		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-1636-DLFS	16	1	25	M36X2	L28	1.26	32	0.14	3.5	1.61	1 5/8	41
F4-2045-DLFS	20	1 1/4"	31	M45X2	35L	1.63	41.4	0.08	2	1.97	2"	50
F4-2452-DLFS	24	1 1/2"	38	M52X2	42L	1.56	39.5	0.12	3	2.36	2 3/8"	60

F4-DHM

Metric DIN Heavy Male

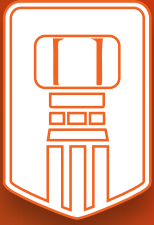


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

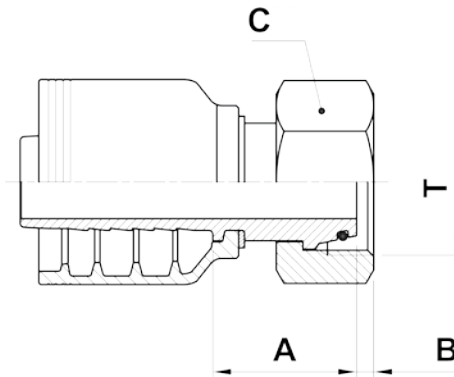
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		E		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0824-DHM	08	1/2	12	M24X1.5	16S	1.15	29.2	0.55	14	0.95	15/16	24
F4-1236-DHM	12	3/4	19	M36X2	25S	1.50	38	0.71	18	1.42	1 7/16	36
F4-1642-DHM	16	1	25	M42X2	30S	1.61	41	0.79	20	1.81	1 13/16	46



F4-DHFS

Metric DIN Heavy Female O-Ring Swivel



USE WITH TEXCEL HOSE SERIES

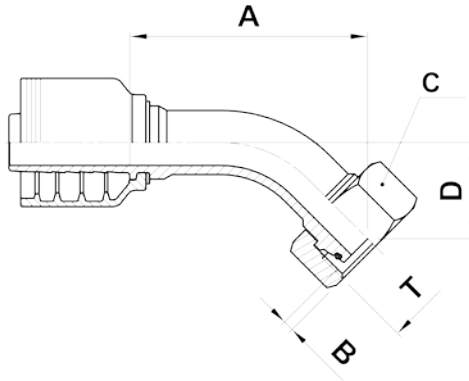
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0824-DHFS	08	½	12	M24X1.5	16S	1.33	33.8	0.12	3	1.18	1 ⅜	30
F4-1030-DHFS	10	⅝	16	M30X2	20S	1.34	34	0.14	3.5	1.42	1 ⅞	36
F4-1036-DHFS	10	⅝	16	M36X2	25S	1.69	43	0.12	3	1.81	1 13/16	46
F4-1230-DHFS	12	¾	19	M30X2	20S	1.36	34.5	0.12	3.2	1.42	1 ⅞	36
F4-1236-DHFS	12	¾	19	M36X2	25S	1.56	39.5	0.12	3	1.81	1 13/16	46
F4-1636-DHFS	16	1	25	M36X2	25S	1.65	42	0.12	3	1.81	1 13/16	46
F4-1642-DHFS	16	1	25	M42X2	30S	1.76	44.6	0.24	6	1.97	2	50
F4-2052-DHFS	20	1 ¼	31	M52X2	38S	1.93	48.9	0.26	6.5	2.36	2 ⅜	60

F4-DHFS45

DKOS Female Swivel 45° Bent Tube

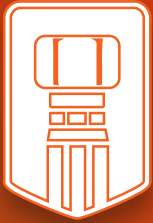


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

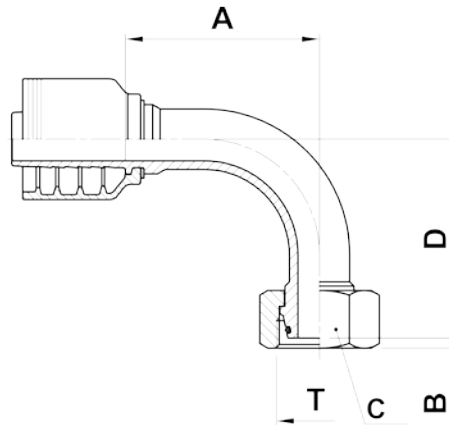
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE				TUBE SIZE	A		B		D		C		
	SIZE	INCH	DN	THREAD SIZE		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0824-DHFS45	08	1/2	12	M24X1.5	16S	2.19	55.7	0.12	3	1.02	26	1.18	1 3/16	30
F4-1230-DHFS45	12	3/4	19	M30X2	20S	2.34	6.04	0.12	3	1.11	28.3	1.42	1 7/16	36
F4-1236-DHFS45	12	3/4	19	M36X2	25S	2.71	68.9	0.12	3	1.19	30.4	1.81	1 13/16	46
F4-1642-DHFS45	16	1	25	M42X2	30S	3.50	89	0.24	6	1.45	37	1.97	2	50
F4-2052-DHFS45	20	1 1/4"	31	M52X2	38S	4.85	123.3	0.26	6.5	1.80	45.6	2.36	2 3/8"	60



F4-DHFS90

DKOS Female Swivel 90° Bent Tube



USE WITH TEXCEL HOSE SERIES

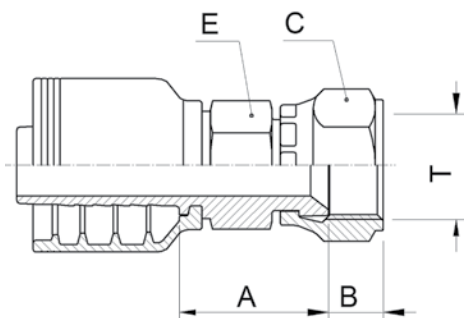
HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	TUBE SIZE	A		B		D		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F4-0824-DHFS90	08	½	12	M24X1.5	16S	1.53	38.9	0.12	3	1.67	42.5	1.18	1 ⅜	30
F4-1230-DHFS90	12	¾	19	M30X2	20S	2.19	55.5	0.12	3.2	2.24	57	1.42	1 ⅞	36
F4-1236-DHFS90	12	¾	19	M36X2	25S	2.18	55.5	0.12	3	2.36	60	1.81	1 ⅞	46
F4-1642-DHFS90	16	1	25	M42X2	30S	2.91	74	0.24	6	2.95	75	1.97	2	50
F4-2052-DHFS90	20	1 ¼	31	M52X2	38S	3.76	95.6	0.26	6.5	4.09	104	2.36	2 ⅝	60

F4-KFS

Komatsu Female Swivel 30° Seat

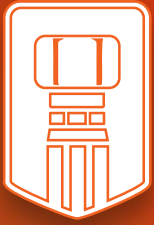


USE WITH TEXCEL HOSE SERIES

HS3K, HS4K, HS5K (to size 20), HS5K-XT, HS6K (to size 16), HBR1 (size 20 to 32), HBR2 (size 20 to 32)

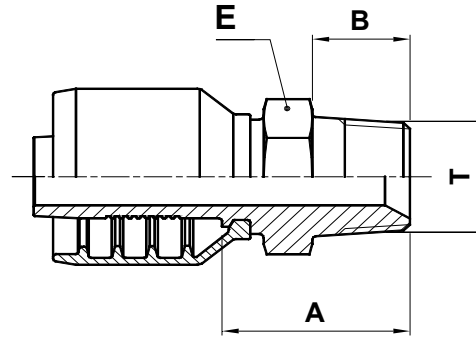
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
F4-0822-KFS	08	½	12	M22X1.5	1.09	27.7	0.55	14	0.87	⅞	22	1.06	1 ⅙	27
F4-1024-KFS	10	⅝	16	M24X1.5	1.12	28.4	0.59	15.1	0.95	1⅝	24	1.26	1 ¼	32
F4-1224-KFS	12	¾	19	M24X1.5	1.22	31.2	0.59	15.1	1.06	1 ⅙	27	1.26	1 ¼	32
F4-1230-KFS	12	¾	19	M30X1.5	1.29	33	0.72	18.3	1.18	1 ⅜	30	1.42	1 ⅞	36
F4-1633-KFS	16	1	25	M33X1.5	1.37	34.7	0.84	21.3	1.26	1 ¼	32	1.61	1 ⅝	41



F6-PM

NPT Male



USE WITH TEXCEL HOSE SERIES

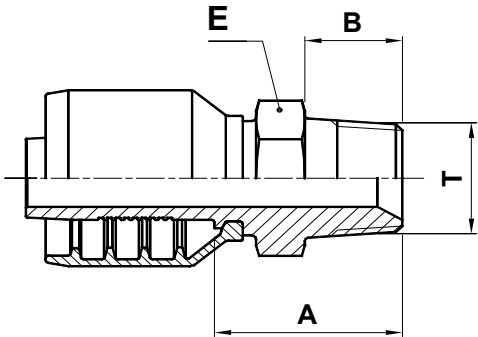
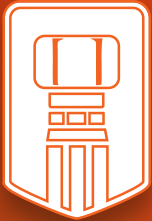
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-2020-PM	20	1 ¼	31	1 ¼" - 11 ½	2.48	62.9	0.96	24.5	1.81	1 13/16	46
F6-2424-PM	24	1 ½	38	1 ½" - 11 ½	2.42	61.5	1.00	25.5	1.97	2	50
F6-3232-PM	32	2	51	2" - 11 ½"	3.14	79.7	1.02	26	2.56	2 9/16	65

F6-PM-X

NPT API Male Extended

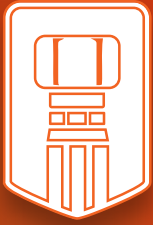


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

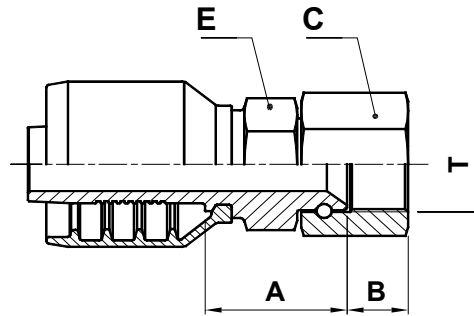
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-3232-PM-X	32	2	51	2" - 11 1/2"	4.40	111.7	2.01	51	2.56	2 9/16"	65



F6-JFS

JIC Female Swivel



USE WITH TEXCEL HOSE SERIES

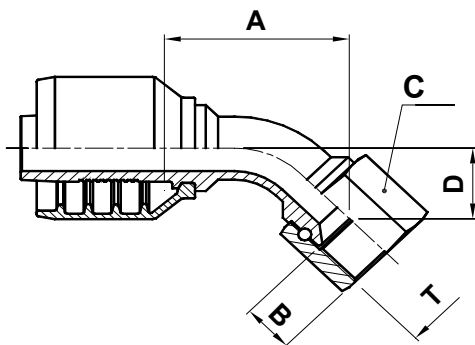
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
F6-2020-JFS	20	1 ¼	31	1 5/8" - 12	2.03	51.5	0.63	16	1.61	1 5/8	41	1.97	2	50
F6-2424-JFS	24	1 ½	38	1 7/8" - 12	2.14	54.4	0.73	18.5	1.97	2	50	2.17	2 3/16	55
F6-3232-JFS	32	2	51	2 ½" - 12	3.05	77.5	0.94	24	2.56	2 9/16	65	2.95	2 15/16	75

F6-JFS45M

JIC Female Swivel 45° Bent Tube Medium Drop

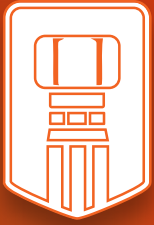


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

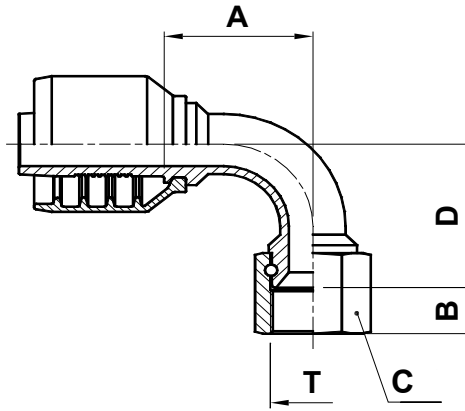
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE				THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN			[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-2020-JFS45M	20	1 1/4	31		1 5/8" - 12	3.9	99	0.62	15.9	1.48	37.5	1.969	2	50
F6-2424-JFS45M	24	1 1/2	38		1 7/8" - 12	5.31	135	0.73	18.6	1.94	49.2	2.165	2 3/16	55
F6-3232-JFS45M	32	2	51		2 1/2" - 12	6.6	167.6	0.94	24	2.71	68.8	2.953	2 15/16	75



F6-JFS90M

JIC Female Swivel 90° Bent Tube Medium Drop



USE WITH TEXCEL HOSE SERIES

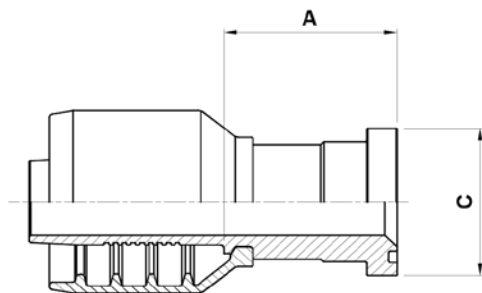
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[in]	[mm]
F6-2020-JFS90M	20	1 ¼	31	1 5/8" - 12	3.41	86.5	0.63	16	3.03	77	1.97	2	50
F6-2424-JFS90M	24	1 ½	38	1 7/8" - 12	4.19	106.3	0.73	18.5	3.94	100	2.17	2 3/16	55
F6-3232-JFS90M	32	2	51	2 ½" - 12	6.07	154.3	0.94	24	5.51	140	2.95	2 15/16	75

F6-FL

Code 61 Flange

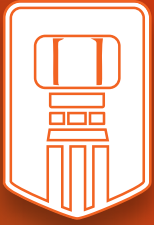


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

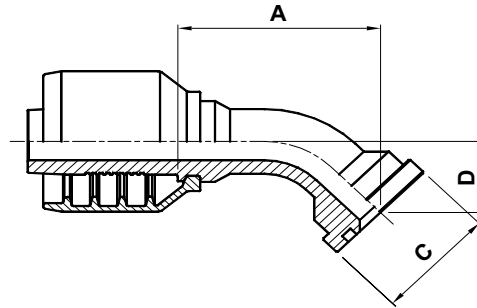
ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		FLANGE	A		C	
		INCH	DN		[in]	[mm]	[in]	[mm]
F6-2424-FL	24	1 ½	38	1 ½"	2.44	62	2.37	60.3
F6-2432-FL	24	1 ½	38	2"	3.03	77	2.81	71.4
F6-3232-FL	32	2	51	2"	3.77	95.7	2.81	71.4



F6-FL45

Code 61 Flange 45° Bend



USE WITH TEXCEL HOSE SERIES

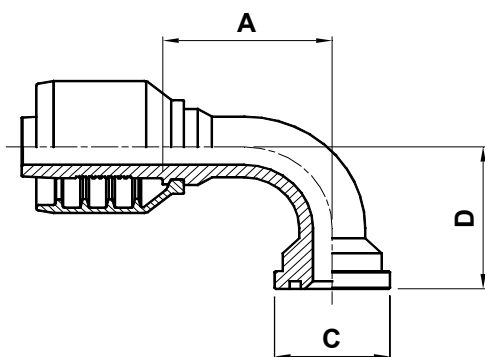
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2424-FL45	24	1 ½	38	1 ½"	5.98	152	2.37	60.3	1.85	47
F6-2432-FL45	24	1 ½"	38	2"	5.23	132.8	2.81	71.4	1.84	46.8
F6-3232-FL45	32	2	51	2"	5.91	150	2.81	71.4	2.09	53

F6-FL90

Code 61 Flange 90° Bend

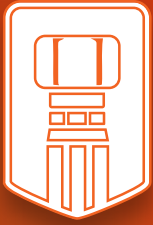


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

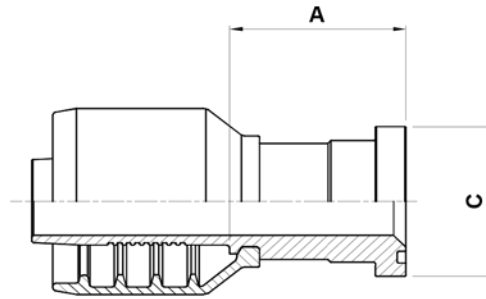
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2424-FL90	24	1 ½	38	1 ½"	5.20	132	2.37	60.3	4.07	103.5
F6-2432-FL90	24	1 ½"	38	2"	4.57	116	2.81	71.4	4.09	104
F6-3232-FL90	32	2	51	2"	6.10	155	2.81	71.4	4.84	123



F6-FLH

Code 62 Flange



USE WITH TEXCEL HOSE SERIES

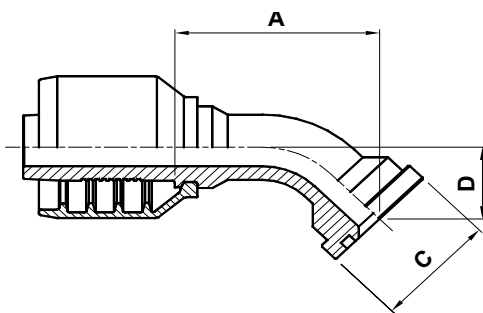
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		FLANGE	A		C	
		INCH	DN		[in]	[mm]	[in]	[mm]
F6-2020-FLH	20	1 ¼	31	1 ¼"	3.03	76.9	2.13	54
F6-2024-FLH	20	1 ½	31	1 ½"	3.20	81.4	2.50	63.5
F6-2424-FLH	24	1 ½	38	1 ½"	3.23	82	2.50	63.5
F6-3232-FLH	32	2	51	2"	4.56	115.7	3.13	79.4

F6-FLH45

Code 62 Flange 45° Bend

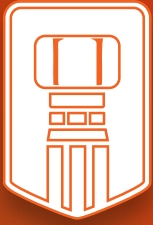


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

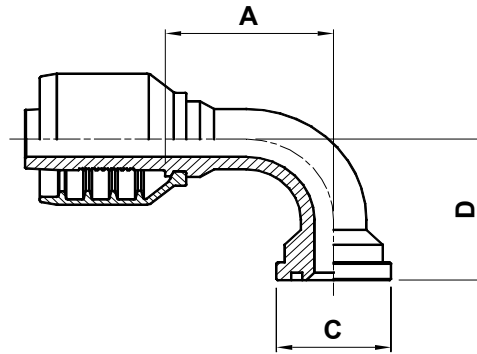
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2020-FLH45	20	1 ¼	31	1 ¼"	4.55	115.5	2.13	54	1.72	43.8
F6-2024-FLH45	20	1 ¼	31	1 ½"	4.63	117.5	2.50	63.5	1.89	48
F6-2424-FLH45	24	1 ½	38	1 ½"	5.98	152	2.50	63.5	1.85	47
F6-2432-FLH45	24	1 ½"	38	2"	5.75	146	3.13	79.4	2.24	57
F6-3232-FLH45	32	2	51	2"	6.85	174	3.13	79.4	2.40	61



F6-FLH90

Code 62 Flange 90° Bend



USE WITH TEXCEL HOSE SERIES

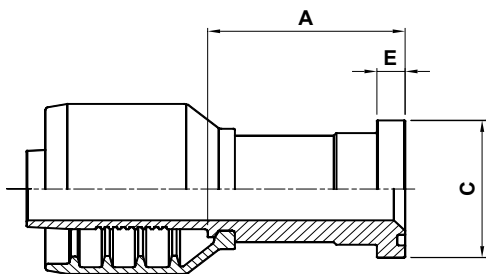
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2016-FLH90	20	1 ¼"	31	1"	4.31	109.5	1.87	47.6	3.43	87
F6-2020-FLH90	20	1 ¼"	31	1 ¼"	4.09	104	2.13	54	3.39	86
F6-2024-FLH90	20	1 ¼"	31	1 ½"	4.10	104.2	2.50	63.5	3.86	98
F6-2424-FLH90	24	1 ½"	38	1 ½"	4.90	124.5	2.50	63.5	4.09	104
F6-3232-FLH90	32	2"	51	2"	6.38	162	3.13	79.4	5.28	134

F6-FLHC

Code 62 CAT Flange

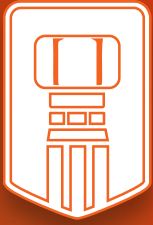


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

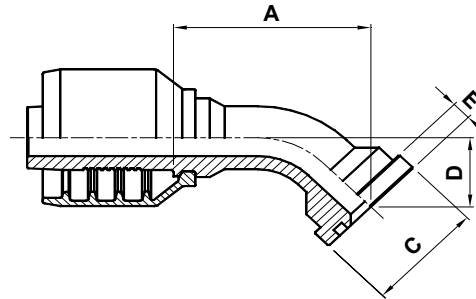
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		E	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2020-FLHC	20	1 ¼	31	1 ¼"	2.99	76	2.13	54	0.57	14.5
F6-2024-FLHC	20	1 ¼	31	1 ½"	3.31	84	2.50	63.5	0.57	14.5
F6-2424-FLHC	24	1 ½	38	1 ½"	3.31	84	2.50	63.5	0.57	14.5



F6-FLH45C

Code 62 CAT Flange 45° Bend



USE WITH TEXCEL HOSE SERIES

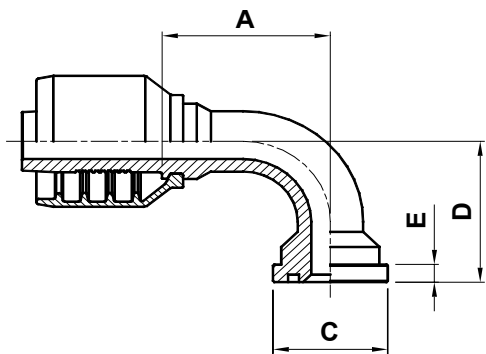
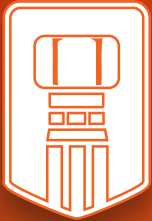
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D		E	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2020-FLH45C	20	1 ¼	31	1 ¼"	4.67	118.5	2.13	54	1.83	46.5	0.57	14.5
F6-2424-FLH45C	24	1 ½	38	1 ½"	6.04	153.5	2.50	63.5	1.91	48.5	0.57	14.5

F6-FLH90C

Code 62 CAT Flange 90° Bend

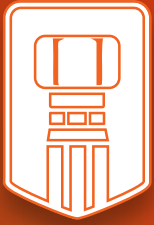


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

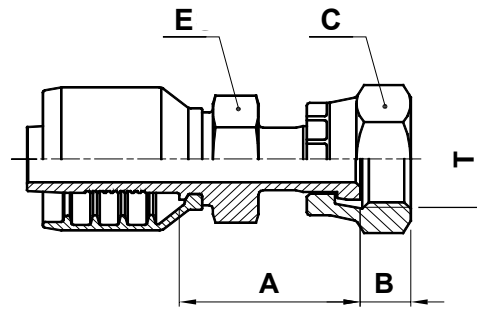
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	A		C		D		E	
	DN	INCH	SIZE		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]
F6-2020-FLH90C	20	1 ¼	31	1 ¼"	4.09	104	2.13	54	3.55	90.2	0.57	14.5
F6-2424-FLH90C	24	1 ½	38	1 ½"	5.08	129	2.50	63.5	4.29	109	0.57	14.5
F6-3232-FLH90C	32	2	51	2"	6.26	159	3.13	79.4	5.35	136	0.57	14.5



F6-OFS

ORFS Female Swivel



USE WITH TEXCEL HOSE SERIES

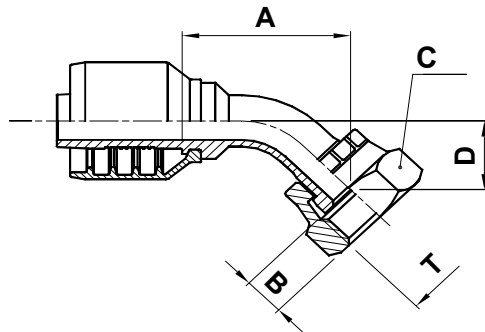
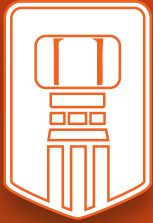
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C		E	C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]	[in]	[in]	[mm]
F6-2020-OFS	20	1 1/4	31	1 1/16" - 12	2.20	55.9	0.58	14.8	1.614	1 5/8	41	1.969	2	50
F6-2424-OFS	24	1 1/2"	38	2" - 12	2.31	58.7	0.58	14.8	1.97	2"	50	2.36	2 3/8"	60

F6-OFS45M

ORFS Female Swivel 45° Bend Tube

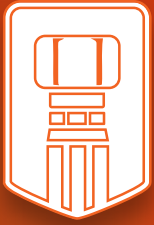


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

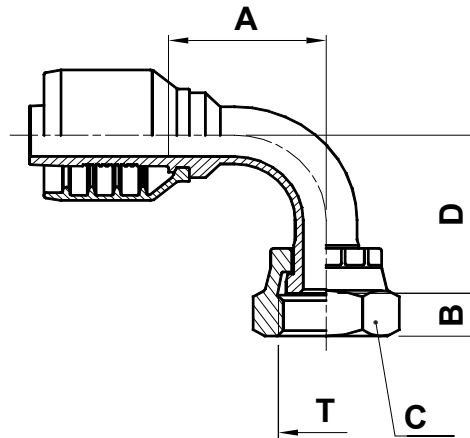
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-2020-OFS90M	20	1 1/4	31	1 1/16" - 12	3.9	99	0.58	14.8	3.03	77	1.969	2	50



F6-OFS90M

ORFS Female Swivel 90° Bend Tube



USE WITH TEXCEL HOSE SERIES

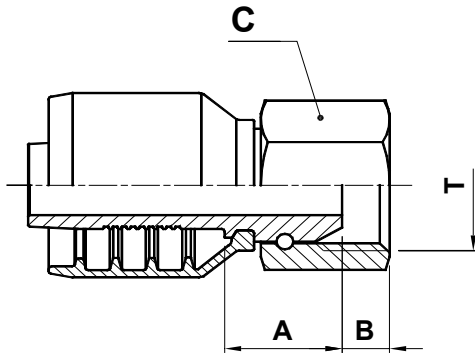
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE PIECE FITTING

CODE	HOSE		THREAD SIZE	A		B		D		C		
	SIZE	INCH DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-2020-OFS90M	20 1 1/4	31	1 1/16" - 12	3.44	87.5	0.58	14.8	3.03	77	1.969	2	50

F6-BFS

BSPP Female Swivel

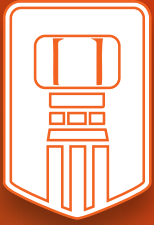


USE WITH TEXCEL HOSE SERIES

HS5K (size 24 to 32), HS6K (size 20 to 24)

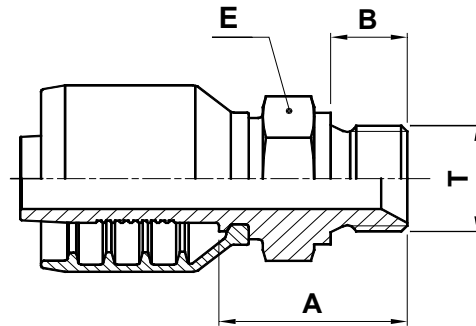
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-2424-BFS	24	1 1/2	38	1 1/2" - 11	1.50	38	0.47	12	2.165	2 3/16	55
F6-3232-BFS	32	2	51	2" - 11	1.72	43.6	0.63	16	2.756	2 3/4	70



F6-BPM

BSPP Male



USE WITH TEXCEL HOSE SERIES

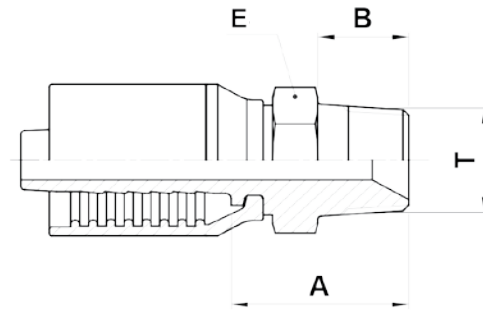
HS5K (size 24 to 32), HS6K (size 20 to 24)

ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
F6-2424-BPM	24	1 1/2	38	1 1/2" - 11	2.07	52.5	0.87	22	2.165	2 3/16	55
F6-3232-BPM	32	2	51	2" - 11	2.65	67.2	0.98	25	2.756	2 3/4	70

FT-PM

NPT Male Pipe

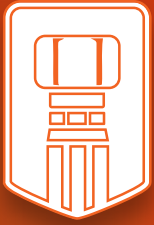


USE WITH TEXCEL HOSE SERIES

BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

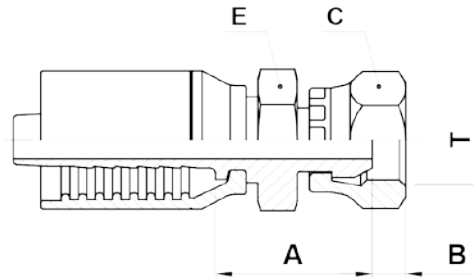
ONE PIECE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
FT-0202-PM	02	1/8	3	1/8" - 27	0.82	20.8	0.37	9.5	0.44	7/16	11.11
FT-0402-PM	04	1/4	6	1/8" - 27	0.87	22	0.37	9.5	0.55	9/16	14
FT-0404-PM	04	1/4	6	1/4" - 18	1.04	26.5	0.55	14	0.55	9/16	14
FT-0604-PM	06	3/8	10	1/4" - 18	1.04	26.5	0.55	14	0.67	1 1/16	17
FT-0606-PM	06	3/8	10	3/8" - 18	1.10	28	0.55	14	0.75	3/4	19
FT-0806-PM	08	1/2	12	3/8" - 18	1.12	28.5	0.55	14	0.75	3/4	19
FT-0808-PM	08	1/2	12	1/2" - 14	1.32	33.5	0.75	19	0.87	7/8	22
FT-1008-PM	10	5/8	16	1/2" - 14	1.32	33.5	0.75	19	0.95	15/16	24
FT-1212-PM	12	3/4	19	3/4" - 14	1.63	41.5	0.75	19	1.06	1 1/16	27
FT-1616-PM	16	1	25	1" - 11 1/2	1.89	48	0.94	24	1.42	1 1/16	36



FT-PFS

NPSM Female Swivel



USE WITH TEXCEL HOSE SERIES

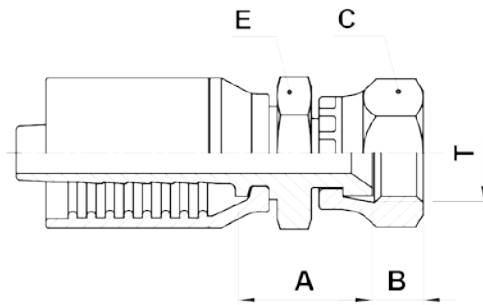
BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8,

ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
F6-0606-PFS	6	3⁄8	10	3⁄8" -18	26.5	1.04	0.22	5.7	0.866	7⁄8	22	0.866	7⁄8	22
FT-0808-PFS	08	1⁄2	12	1⁄2" - 14	1.14	29	0.27	6.9	0.866	7⁄8	22	1.06	1 1⁄16	27

FT-JFS

JIC Female Swivel

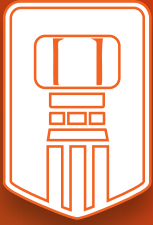


USE WITH TEXCEL HOSE SERIES

BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

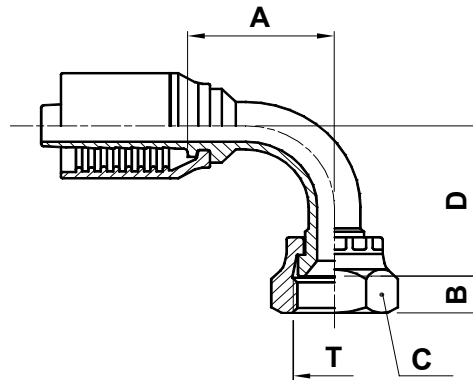
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C				
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]	[in]	[in]	[mm]
FT-0404-JFS	04	¼	6	7/16" - 20	0.82	20.8	0.34	8.7	0.55	9/16	14	0.55	9/16	14
FT-0406-JFS	04	¼	6	9/16" - 18	0.91	23	0.37	9.5	0.55	9/16	14	0.75	¾	19
FT-0606-JFS	06	3/8	10	9/16" - 18	0.91	23	0.37	9.5	0.67	11/16	17	0.69	11/16	17.46
FT-0608-JFS	06	3/8	10	¾" - 16	1.02	26	0.42	10.7	0.75	¾	19	0.87	7/8	22
FT-0808-JFS	08	½	12	¾" - 16	1.04	26.5	0.42	10.7	0.75	¾	19	0.87	7/8	22
FT-0810-JFS	08	½	12	7/8" - 14	1.12	28.5	0.50	12.7	0.87	7/8	22	1.06	1 1/16	27
FT-1010-JFS	10	5/8	16	7/8" - 14	1.17	29.8	0.50	12.7	0.87	7/8	22	1.06	1 1/16	27
FT-1212-JFS	12	¾	19	1 1/16" - 12	1.36	34.5	0.56	14.3	1.06	1 1/16	27	1.26	1 ¼	32
FT-1616-JFS	16	1	25	1 5/16" - 12	1.40	35.5	0.63	16	1.26	1 ¼	32	1.50	1 ½	38



FT-JFS90M

JIC Female Swivel 90° Bent Tube Medium Drop



USE WITH TEXCEL HOSE SERIES

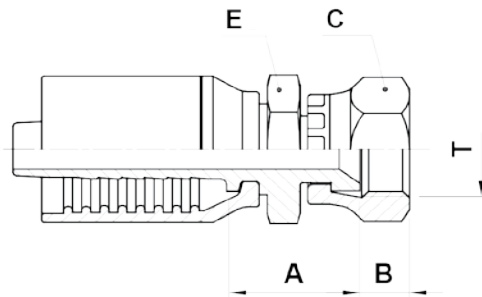
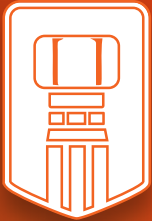
BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		D		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
FT-0404-JFS90M	03	¼	6	⅞" - 20	1.00	25.3	8.7	0.34	0.96	24.5	0.55	⅜	14
FT-0606-JFS90M	06	⅜	10	⅝" - 18	1.09	27.8	0.37	9.5	0.91	23	0.75	¾	19
FT-0808-JFS90M	08	½	12	¾" - 16	1.56	39.5	0.42	10.7	1.18	30	0.87	⅞	22

FT-SFS

SAE Female

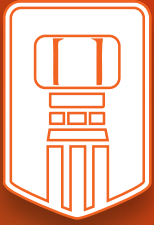


USE WITH TEXCEL HOSE SERIES

BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

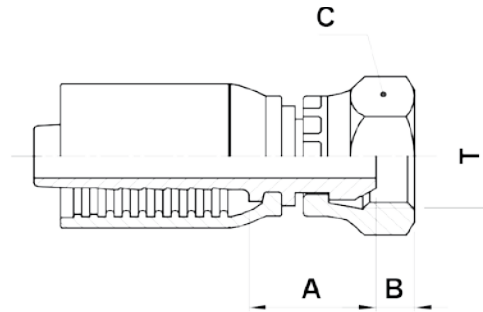
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
FT-0606-SFS	06	¾	10	⅝" - 18	0.94	24	0.43	10.8	0.748	¾	19	0.87	⅞	22



FT-BFS

BSP Female Swivel



USE WITH TEXCEL HOSE SERIES

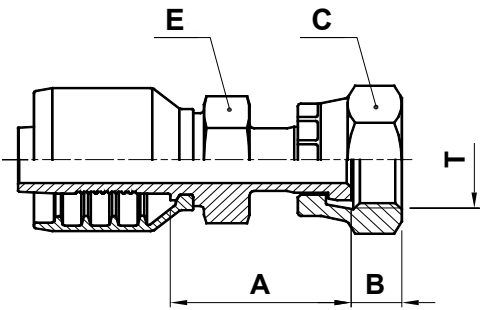
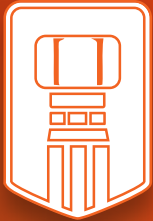
BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		C		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
FT-0606-BFS	06	3/8	10	3/8" - 19	0.73	18.5	0.24	6	0.87	7/8	22
FT-0808-BFS	08	1/2	12	1/2" - 14	0.83	21	0.26	6.5	1.067	1 1/16	27

FT-OFS

ORFS Female Swivel

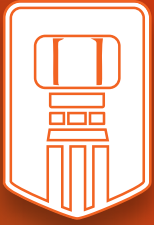


USE WITH TEXCEL HOSE SERIES

BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

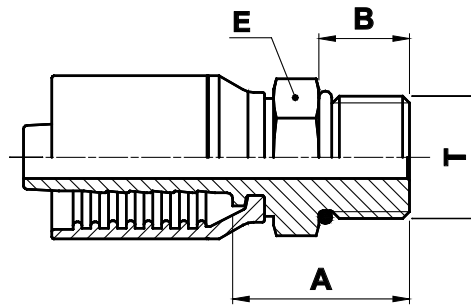
ONE PIECE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]
FT-0606-OFS	06	3/8"	10	1 1/16" - 16	1.26	32	0.37	9.5	0.67	1 1/16"	17
FT-0608-OFS	06	3/8"	10	1 3/16" - 16	1.44	36.5	0.43	11	0.75	3/4"	19



FT-OBM

ORB Male



USE WITH TEXCEL HOSE SERIES

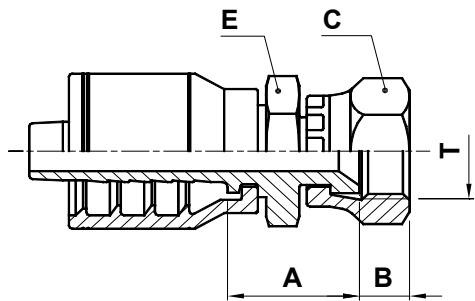
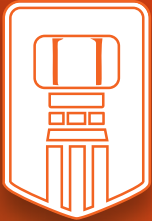
BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

ONE-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		THREAD SIZE	A		B		E		
		INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]
FT-0606-OMB	06	3/8"	10	9/16" - 18	0.96	24.5	0.39	9.9	0.67	1 1/16"	17

FT-JISS

JIS Female Swivel 30° Seat

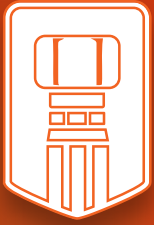


USE WITH TEXCEL HOSE SERIES

BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

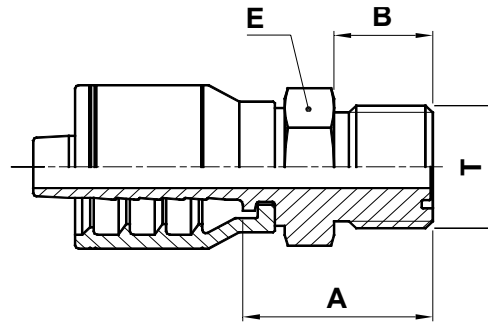
ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E	C			
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]		[in]	[mm]	[in]	[mm]
FT-0606-JISS 06	3/8"	10	3/8" - 19	0.87	22	0.37	9.5	0.75	3/4"	19	0.87	7/8"	22



FT-OM

ORFS Male



USE WITH TEXCEL HOSE SERIES

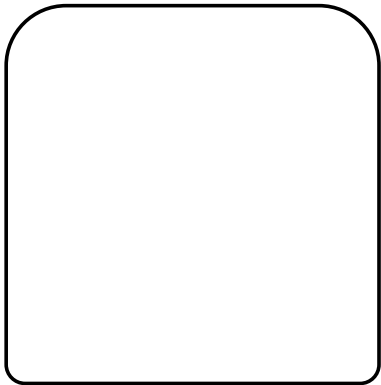
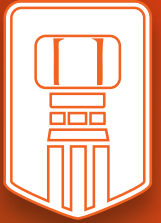
BR14, TR7, TTR7, TNCR7, TTNCR7, TR8, TTR8, TNCR8

ONE-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	A		B		E		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
FT-0606-OM	06	3⁄8"	10	13⁄16" - 16	1.04	26.5	0.50	12.8	0.75	3⁄4"	19

FS-FER

R4 SUCTION HOSE FERRULE

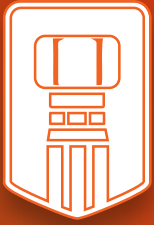


USE WITH TEXCEL HOSE SERIES

HBR4

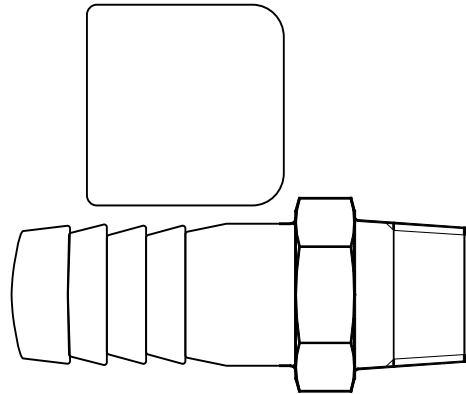
TWO-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		FERRULE LENGTH		FERRULE OD	
		INCH	DN	[in]	[mm]	[in]	[mm]
FS-12-FER	12	¾"	19	0.992	25.2	1.409	35.8
FS-16-FER	16	1"	25	1.122	28.5	1.748	44.4
FS-20-FER	20	1 ¼"	31	1.559	39.6	2.000	50.8
FS-24-FER	24	1 ½"	38	1.598	40.6	2.244	57.0
FS-32-FER	32	2"	51	2.031	51.6	2.756	70.0



FS-PM

NPT Male Pipe



USE WITH TEXCEL HOSE SERIES

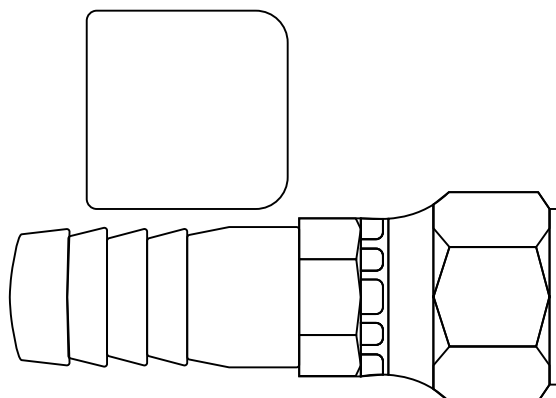
HBR4

TWO-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	FITTING LENGTH		FITTING THREAD LENGTH		FITTING HEX SIZE		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]
FS-1212-PM	12	3/4"	19	3/4" - 14	2.441	62.0	0.748	19.0	1.063	1 1/16"	27.0
FS-1616-PM	16	1"	25	1" - 11,1/2	2.803	71.2	0.945	24.0	1.378	1 3/16"	35.0
FS-2020-PM	20	1 1/4"	31	1 1/4" - 11,1/2	3.476	88.3	0.969	24.6	1.752	1 3/4"	44.5
FS-2424-PM	24	1 1/2"	38	1 1/2" - 11,1/2	3.701	94.0	1.024	26.0	2.000	2"	50.8
FS-3232-PM	32	2"	51	2" - 11,1/2	4.370	111.0	1.059	26.9	2.500	2 1/2"	63.5

FS-JFS

JIC Female Swivel

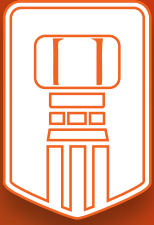


USE WITH TEXCEL HOSE SERIES

HBR4

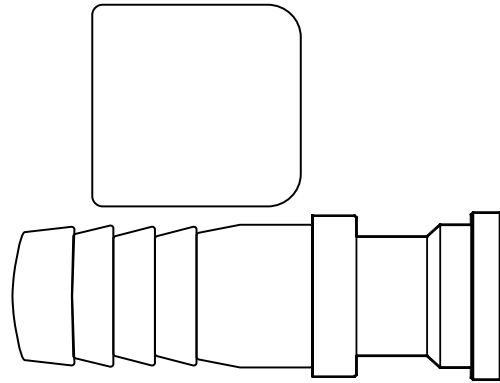
TWO-PIECE NO-SKIVE FITTING

CODE	HOSE			THREAD SIZE	FITTING LENGTH		FITTING THREAD LENGTH		FITTING HEX SIZE			FEMALE SWIVEL HEX SIZE		
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	 [in]	[mm]	[in]	 [in]	[mm]
FS-1212-JFS	12	¾"	19	1, 1/16" - 12	2.035	51.7	0.488	12.4	1.063	1 1/16"	27.0	1.260	1 ¼"	32.0
FS-1616-JFS	16	1"	25	1, 5/16" - 12	2.193	55.7	0.567	14.4	1.378	1 3/16"	35.0	1.496	1 ½"	38.0
FS-2020-JFS	20	1 ¼"	31	1, 5/8" - 12	3.016	76.6	0.591	15.0	1.752	1 ¾"	44.5	1.969	2"	50.0
FS-2424-JFS	24	1 ½"	38	1, 7/8" - 12	3.315	84.2	0.669	17.0	2.000	2"	50.8	2.165	2 3/16"	55.0
FS-3232-JFS	32	2"	51	2, ½" - 12	3.917	99.5	0.906	23.0	2.500	2 ½"	63.5	2.894	2 7/8"	73.5



FS-FL

Code 61 Flange



USE WITH TEXCEL HOSE SERIES

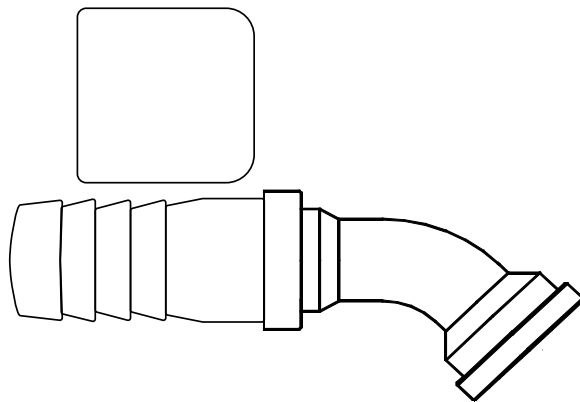
HBR4

TWO-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	FITTING LENGTH		FLANGE OD	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]
FS-1212-FL	12	¾"	19	¾"	2.657	67.5	1.500	38.1
FS-1616-FL	16	1"	25	1"	2.961	75.2	1.752	44.5
FS-2020-FL	20	1 ¼"	31	1 ¼"	3.504	89.0	2.000	50.8
FS-2424-FL	24	1 ½"	38	1 ½"	4.028	102.3	2.374	60.3
FS-3232-FL	32	2"	51	2"	5.150	130.8	2.815	71.5

FS-FL45

Code 61 Flange 45° Bend

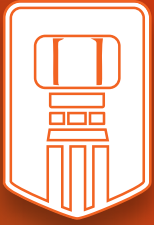


USE WITH TEXCEL HOSE SERIES

HBR4

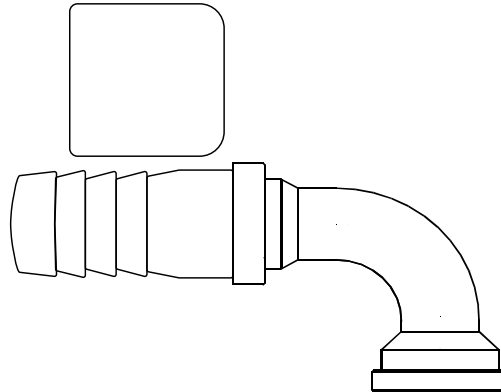
TWO-PIECE NO-SKIVE FITTING

CODE	SIZE	HOSE		FLANGE	FITTING LENGTH		FLANGE OD		FITTING DROP LENGTH	
		INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
FS-1212-FL45	12	¾"	19	¾"	4.264	108.3	1.500	38.1	1.142	29.0
FS-1616-FL45	16	1"	25	1"	4.713	119.7	1.752	44.5	1.220	31.0
FS-2020-FL45	20	1 ¼"	31	1 ¼"	5.886	149.5	2.000	50.8	1.496	38.0
FS-2424-FL45	24	1 ½"	38	1 ½"	6.350	161.3	2.374	60.3	1.732	44.0
FS-3232-FL45	32	2"	51	2"	8.260	209.8	2.815	71.5	2.362	60.0



FS-FL90

Code 61 Flange 90° Bend

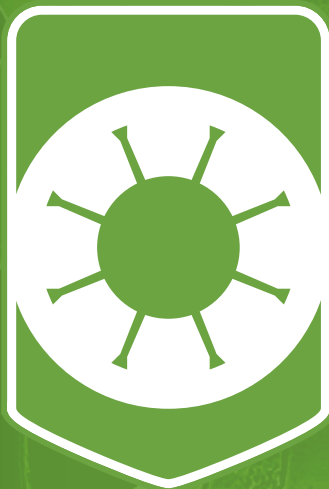


USE WITH TEXCEL HOSE SERIES

HBR4

TWO-PIECE NO-SKIVE FITTING

CODE	HOSE			FLANGE	FITTING LENGTH		FLANGE OD		FITTING DROP LENGTH	
	SIZE	INCH	DN		[in]	[mm]	[in]	[mm]	[in]	[mm]
FS-1212-FL90	12	¾"	19	¾"	5.217	132.5	1.500	38.1	2.126	54.0
FS-1616-FL90	16	1"	25	1"	6.091	154.7	1.752	44.5	2.441	62.0
FS-2020-FL90	20	1 ¼"	31	1 ¼"	7.106	180.5	2.000	50.8	3.110	79.0
FS-2424-FL90	24	1 ½"	38	1 ½"	7.886	200.3	2.374	60.3	3.268	83.0
FS-3232-FL90	32	2"	51	2"	10.622	269.8	2.815	71.5	5.157	131.0



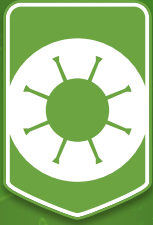
EQUIPMENT

TC100-SH / TC100-SP
TC165

193
194

TC200 / TC450
THC100

195
197



TC100-SH / TC100-SP

1" Service Hose Crimpers

The TC100-S portable series hose crimper with the Micrometer Style Adjustment and 35 tons of crimping force has the capability to crimp hoses up to 1" 2 wire and ¾" 4 spiral.

TC100-SH



TECHNICAL DATA

Crimping Force	35 Tons
Hose Capacity	1" braided and ¾" 4 spiral
Dimension	D: 12-½" x W: 12-½" x H: 24"
Weight	48 lbs
Die Series	TDS100 Rubber Caged
Pumps	Hand Pump and Pneumatic Pump

TC100-SH / TC100-SP ACCESSORIES

Standard		Optional
		

TC100-SH-CDP

Part Number	Description
TC100-SH	1" Crimper
TC100DR	Die Rack
TC100HP	Hand Pump
TDS100-16	16mm Dies
TDS100-19	19mm Dies
TDS100-23	23mm Dies
TDS100-27	27mm Dies
TDS100-31	31mm Dies
TDS100-34	34mm Dies
TDS100-38	38mm Dies

TC100-SP-CDP

Part Number	Description
TC100-SP	1" Crimper
TC100DR	Die Rack
TC100FP	Pneumatic Pump
TDS100-16	16mm Dies
TDS100-19	19mm Dies
TDS100-23	23mm Dies
TDS100-27	27mm Dies
TDS100-31	31mm Dies
TDS100-34	34mm Dies
TDS100-38	38mm Dies

TC165

1-1/4" Service Hose Crimper

The TC165 series hose crimper with the Micrometer Style Adjustment and 62 tons of crimping force has the capability to crimp hoses up to 1-1/4" 4 spiral.

TECHNICAL DATA

Crimping Force	62 Tons
Hose Capacity	1-1/4" - 2 braided and 1-1/4" 4 spiral
Dimension	D: 22-1/2" x W: 13" x H: 22-1/2"
Weight	154 lbs
Power	1HP/110V/1Phase (Standard) 2HP/220V/1Phase (Optional)
Die Series	TDS100 Rubber Caged
Reservoir Capacity	1 US Gallon

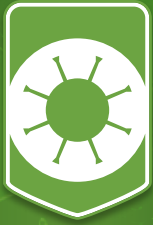


TC165 ACCESSORIES

Standard			Optional
			

TC165-CDP

Part Number	Description
TC165	1 1/4" Crimper
TC165DR	Die Rack
TDS100-16	16mm Dies
TDS100-19	19mm Dies
TDS100-23	23mm Dies
TDS100-27	27mm Dies
TDS100-31	31mm Dies
TDS100-34	34mm Dies
TDS100-38	38mm Dies
TDS100-48L	48Lmm Dies



TC200 / TC450

General Production Hose Crimper

The TC200 hose crimper with the dial micrometer style adjustment and the TC450 with the electronic controller both produce 340 tons of crimping force and have the capability to crimp up to 2-½" spiral hose and 3" industrial hose.



TC200



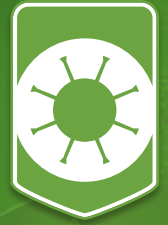
TC450

TECHNICAL DATA

Crimping Force	340 Tons
Hose Capacity	2-½" 6 wire hydraulic and up to 3" industrial hose
Dimension	D: 20" x W: 29" x H: 32"
Weight	635 lbs
Power	7.5HP / 230V / 3Phase (Standard) 7.5HP / 440V / 3Phase (Optional) 5HP / 230 / 1Phase (Optional) 1HP / 12VDC (Optional) 1HP / 24VDC (Optional)
Opening w/o Dies	160mm / 6.30"
Master Die ID	130mm / 5.12"
Master Die Travel	38mm / 1.5"

TC200 / TC450

General Production Hose Crimper



TC200 & TC450 ACCESSORIES

Standard

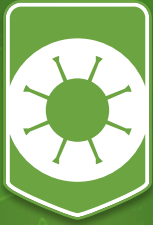


TC200-CDP

Part Number	Description
TC200	2" Crimper
TC200DR	Die Rack
TC-QCT	QC Tool
TDS200-14	14mm Dies
TDS200-16	16mm Dies
TDS200-19	19mm Dies
TDS200-23	23mm Dies
TDS200-27	27mm Dies
TDS200-31	31mm Dies
TDS200-34	34mm Dies
TDS200-38	38mm Dies
TDS200-48	48mm Dies
TDS200-57	57mm Dies
TDS200-60	60mm Dies
TDS200-70	70mm Dies
TDS200-74	74mm Dies

TC450-CDP

Part Number	Description
TC450	2" Crimper
TC200DR	Die Rack
TC-QCT	QC Tool
TDS200-14	14mm Dies
TDS200-16	16mm Dies
TDS200-19	19mm Dies
TDS200-23	23mm Dies
TDS200-27	27mm Dies
TDS200-31	31mm Dies
TDS200-34	34mm Dies
TDS200-38	38mm Dies
TDS200-48	48mm Dies
TDS200-57	57mm Dies
TDS200-60	60mm Dies
TDS200-70	70mm Dies
TDS200-74	74mm Dies



THC100

2" Cut Off Saw 220V Single Phase

The THC100 hydraulic hose cutting system is break-through technology using a toothed blade, cutting with the backs of each tooth, so the blade does not take a kerf. The saw bends the hose into the blade spreading the cut edges to avoid burning and smoking.



TECHNICAL DATA

Hose Capacity	2" ID x 6 Wire Hydraulic Hose
Power	5HP/220V/1Phase

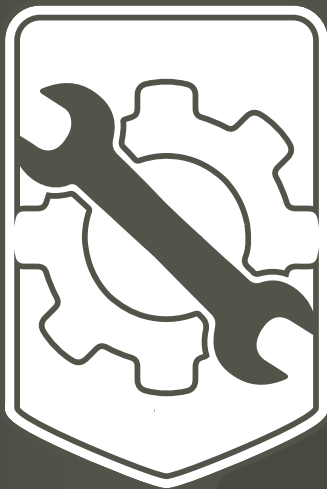
Blade Type	Blade Size Diameter	Arbor Size	Part Number
Scalloped Cut Off Saw Blade	10 inch	40 mm	THCB10-125-40
Diamond Cut Off Saw Blade	10 inch	40 mm	THCB10-125-40D



SCALLOPED CUT OFF SAW BLADE



DIAMOND CUT OFF SAW BLADE



TECHNICAL

Technical	99	Chemical Compatibility	219
Hose Assembly Tips	215	Torque Specification for Carbon steel	225



TECHNICAL

S.T.A.M.P.E.D.

Texcel recommends using the following S.T.A.M.P.E.D. guide to determine the correct hose, fitting and attachment method for your intended application.

SIZE	Hose length, fittings included (OAL):
	I.D.:
	O.D.:
	Hose tolerance:
TEMPERATURE	Minimum temperature of material going through the hose:
	Maximum temperature of material going through the hose:
	Minimum environmental temperature:
	Maximum environmental temperature:
	Indoor or outdoor use:
APPLICATION	Exceptional flexibility required? (Yes/No):
	Exposure to factors such as extreme ozone, heat, oil, abrasive materials, acid or other corrosive chemicals? (Yes/No):
	Conductivity requirement? (Yes/No):
	Other:
MATERIALS	Types of hydraulic fluid?
	Liquid? Specify:
	Gas? Specify:
	Air? Specify:
PRESSURE	Working pressure of hose:
	Spikes in pressure:
	Vacuum requirements? (Yes/No):
	Style and material:
END	Size:
	Permanent/ Field Attachable
	Materials
	Working pressure of Fittings (including the termination)
	Thread type
DELIVERY	Date required:
	Quantity needed:
	Testing Required? (Yes/No) If yes, then type:
	Any industry, government regulatory, type approval or certification required? (Yes/No)

Recommended Fabrication Processes



TECHNICAL

1. SELECT AND INSPECT COMPONENTS

- Select proper hose and fitting with Texcel recommendation ONLY.
- Inspect for damages and imperfections as these impact the assembly quality.
- Ensure components match assembly specifications (hoses, fittings and termination type, dimensions, fitting materials, temperature and pressure rating of hoses, fittings and terminations.)

2. PREPARE AND CUT HOSE

- Select the Texcel recommended method to measure the length of a hose assembly.
- Select the Texcel recommended tools ONLY.
- Hose must be cut squarely. Angular cuts can result in poor assembly quality.
- Clean all debris from the fitting area as it can impact assembly integrity.

3. FITTING PROCEDURE

- Different hose constructions require different fitting procedures to ensure reliability and consistency of hose assembly performance.
- Verify that the selected components meet dimensional requirements.
- Follow Texcel recommendations to ensure the reliability and consistency of the assemblies performance.
- Attach fittings on the hose per Texcel specifications and recommendations.

4. FITTING INSERTION

- Following Texcel recommendations for hydraulic hose fabrication.
- Mark fitting depth on the hose cover as instructed by Texcel recommendation.
- Lubrication may be required.
- Insert fittings to the proper insertion depth without damaging the hose.

5. INSPECTION AND TESTING

- Verify all components of the hose assembly meet all the requirements of the specifications and the customers' request.
- Identify any appropriate tests for the assembly.



TECHNICAL

Recommended Fabrication Processes (CONT.)

6. CLEANLINESS

- Identify any appropriate cleaning process for assembly to meet the customer and/or industry specifications.
- Follow Texcel recommendation on cleanliness procedure.

7. DOCUMENTATION

- Document any critical characteristics as instructed by customers, industry specifications or internal requirement to ensure the traceability.
- Identify any certifications or labels required.

8. PACKAGING

- Identify any packaging and marking requirements by customers or industry specifications.
- Proper packaging and packaging techniques are required to protect hose assembly.

Component Inspection Best Practice



TECHNICAL

FITTINGS

Upon receipt of a shipment of fittings, the assembly fabricator should perform, at minimum, the following inspection steps:

1. Compare the fittings received with the purchase order by making sure the part numbers agree between the order and the packing slip.
2. Check the count between the packing slip and actual quantity received.
3. Check the product in the package to make sure it agrees with the part number on the package. Supplier catalogs are good reference.
4. When possible, leave the fittings in the original container with the original date code. If a fitting problem arises later, all the fittings of that size and date code can be separated out for 100% inspection purposes.
5. At least one fitting from every box should be inspected for dimensions, defective plating concentricity, snap rings attached to the swivels, and any damage from shipping.

HOSE

Upon the receipt of a shipment of hose, the assembly fabricator should perform, at a minimum, the following inspection steps:

1. Check product numbers on the packing list with the numbers on the packages of the actual merchandise.
2. Check total footage against the packing slip, making sure they agree.
3. Check the product, making sure it agrees with the label on the packaging.
4. Check the hose inside diameter, outside diameter and reinforcement, then verify it against the manufacturer's product information.
5. All hoses should be visibly inspected for damage due to shipping, kinks, loose cover, bulges ballooning, cuts, crush and tears. A certificate of conformance may be requested with the hose fittings and attachments.



TECHNICAL

Calculated Hose Cut Length During Hose Assemble Fabrication

The hose cut length for a hose assembly is calculated by subtracting the cut off factor (distance from the top of the ferrule or collar to the end of the fitting) from the actual assembly length required. Typical length tolerance for an assembly is +/- 1% or less. Thus, the tolerance for the hose cut length should be based on the overall assembly length tolerance. Standard overall assembly length tolerances can be found in the tables below. However, customer specifications would always take precedence. Hose cut length is important, as it will create most of the variation in the overall assembly length.

When establishing proper hose length, motion absorption, hose length changes due to pressure, as well as hose and machine tolerances must be considered. Typical length tolerances for assemblies are shown in the table below.

Note: SAE is the standards organization which originated in the United States and is predominantly a North American organization while ISO originated in Europe. For hose assembly tolerance length, either standard may be referenced and used unless stated otherwise.

HOSE ASSEMBLY LENGTH TOLERANCES (SAE):

Assembly Length Size	Tolerances (decimal in)	Tolerances (fraction in)	Tolerances (mm)
Up through 12 inches (304.8 mm)	0.13	$\frac{1}{8}$	3.2
Over 12 through 18 inches (304.8 through 457.2 mm)	0.19	$\frac{3}{16}$	4.8
Over 18 through 36 inches (457.2 through 914.4 mm)	0.25	$\frac{1}{4}$	6.4
Over 36 inches (914.4 mm)	1%	1%	1%

HOSE ASSEMBLY LENGTH TOLERANCES (ISO):

Assembly Length -16 and smaller	Tolerances (in)	Tolerances (mm)
Up through 24.8 inches (630 mm)	-0.1 to +0.3"	-3 to +7
Over 24.8 through 49.2 inches (630 through 1250 mm)	-0.2 to +0.5"	-4 to +12"
Over 49.2 through 98.4 inches (1250 through 2500 mm)	-0.2 to +0.8"	-6 to +20"
Over 98.4 through 315.0 inches (2500 through 8000 mm)	-0.5% to +1.5%	-0.5% to +1.5%
Over 315 inches (8000 mm)	-0.5% to +3.0%	-1.0% to +3.0%

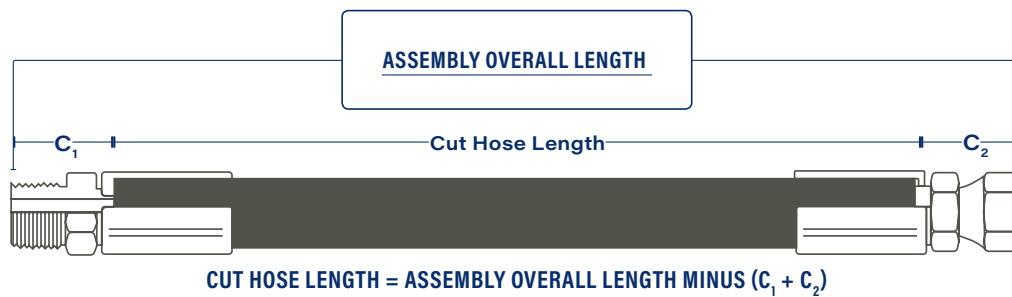
Assembly Length Larger than -16	Tolerances (in)	Tolerances (mm)
Up through 24.8 inches (630 mm)	-0.2 to +0.5"	-4 to +12
Over 24.8 through 49.2 inches (630 through 1250 mm)	-0.2 to +0.8"	-6 to +20"
Over 49.2 through 98.4 inches (1250 through 2500 mm)	-0.2 to +1.0"	-6 to +25"
Over 98.4 through 315.0 inches (2500 through 8000 mm)	-0.5% to +1.5%	-0.5% to +1.5%
Over 315 inches (8000 mm)	-0.5% to +3.0%	-1.0% to +3.0%

Measuring Hose To Determine Hose Cut-Off Length

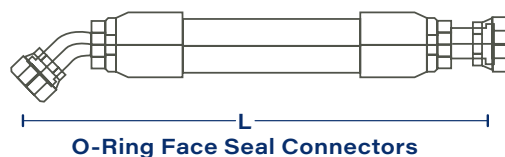
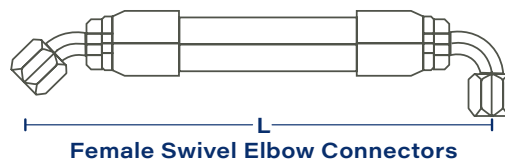
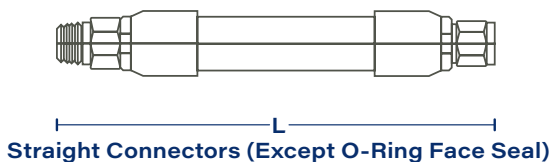
With some assemblies, the length must be within tight tolerances for proper installation. This is especially true for short high pressure hose assemblies.

Note: Before cutting the hose, make sure you understand the difference between "cut hose length" and "assembly overall length" (OAL)

The hose cut length for a hose assembly is calculated by subtracting the cut-off factor (distance from the bottom of the ferrule or collar to the end of the fitting, dimensions "C" below.) Typical length tolerance: Up to and including 12" = +/- .13 in (3.2 mm), over 12" and up to 18": +/- .19 in (4.8 mm), over 18" and up to 36" +/- .25 in (6.4 mm), over 36": +/- 1% of length.



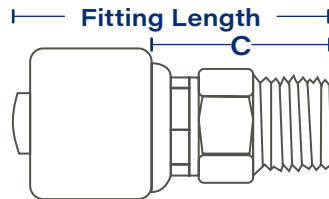
Unless otherwise specified by the customer, the over assembly length is measured from the extreme end of one fitting to the extreme end of the other; except for the O-ring face seal fittings which shall be measured from the sealing face. Where elbow fittings are used, the measurement shall be to the center line of the sealing surface of the elbow end. For examples please see the illustrations below.



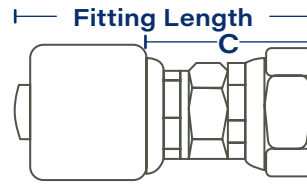
TECHNICAL



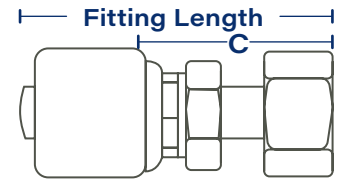
TECHNICAL



MALE PIPE (FIG. A)



FEMALE JIC (FIG. B)



**FEMALE FLAT-FACE SWIVEL
(FIG. C)**

For male thread fittings (Fig. A), the cut-off is measured from the locking collaring to the end of the threads (c) as shown.

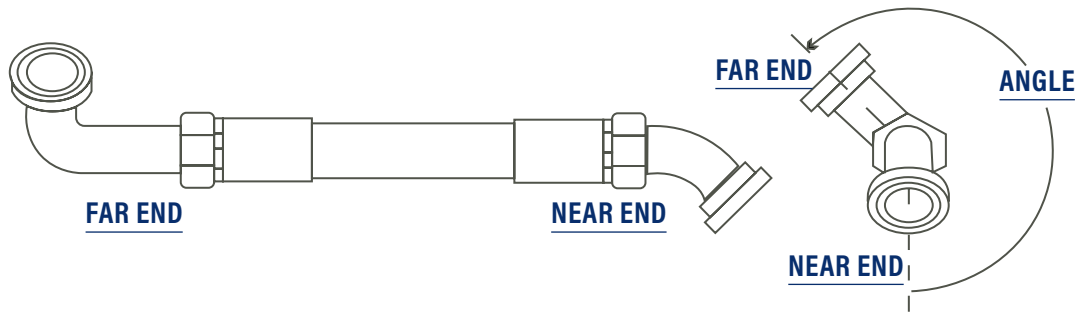
For straight female fittings (Fig. B&C), the cut-off is measured from the locking collar to either the end of the nut or seat depending upon whether the nut can be pulled back exposing the seating surface as shown.

All cut-off values are identified in the fitting tables found in the manufacturer's catalog.

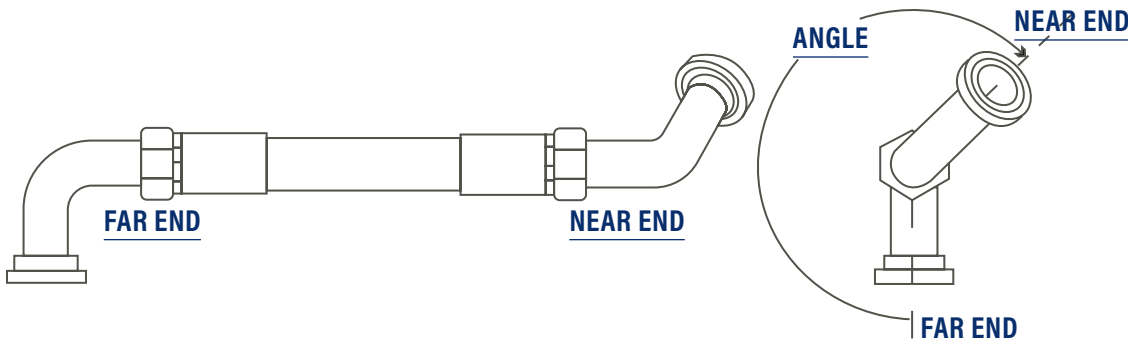
How to Measure

As shown in the figure below, with the centerline of the near end as a base reference, angular displacement is measured counterclockwise to the centerline of the far end.

NEAR END REFERENCE – MEASURE COUNTERCLOCKWISE



As shown in the figure below, with the centerline of the far end as a base reference, angular displacement is measured clockwise to the centerline of the near end.



Displacement angle may have any value up to 360 degrees. Please note that making the angle determination in the wrong direction will result in unacceptable part.

Unless otherwise specified, a tolerance of + 3 degrees is acceptable of assembly lengths up to 610 mm inclusive, and + 5 degrees for assembly lengths over 610 mm.

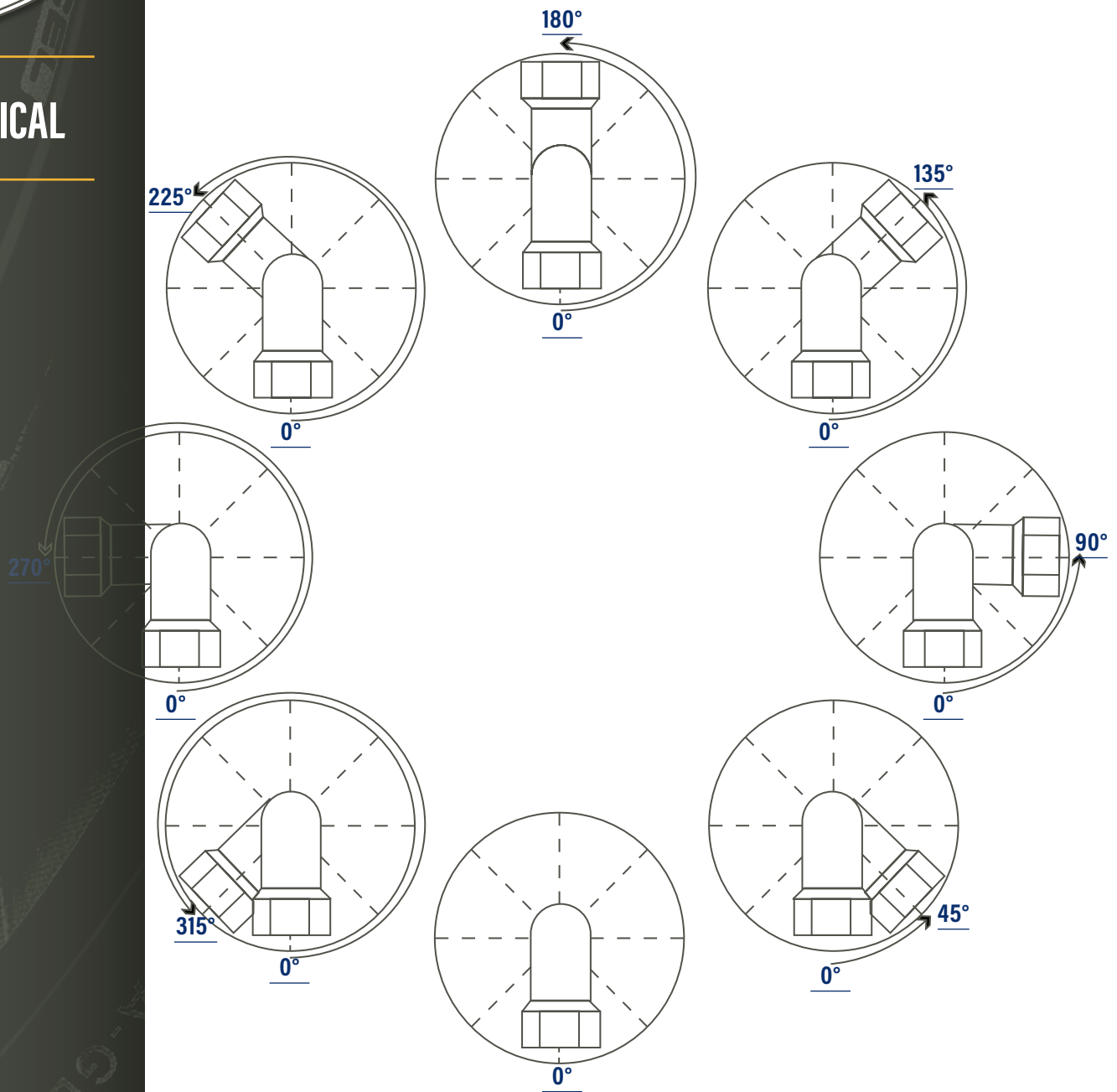


TECHNICAL



TECHNICAL

Terminations Orientations



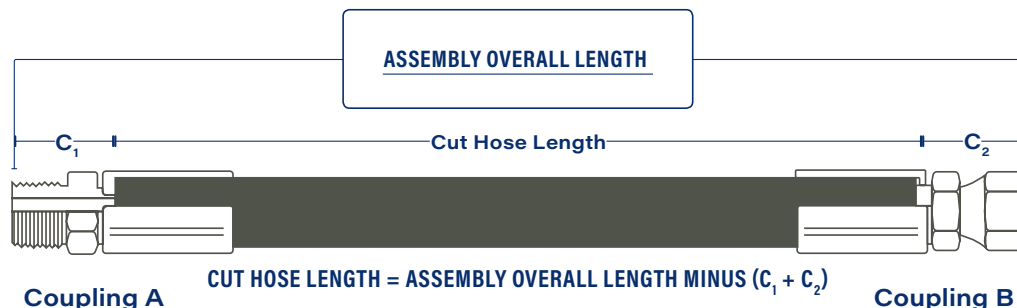


TECHNICAL

Certain routing applications call for accurate hose assembly lengths, especially for short assemblies. When fittings are crimped, a growth length must be factored into the overall length. While SAE provides a tolerance range, growth length can vary from different hose constructions and fitting types. The following steps will determine growth length and provide an accurate overall length for a hydraulic assembly.

Length Change Instructions

1. Determine the cut off length of both fittings.
2. Subtract the fitting cut off factors (C1, C2) from the overall length (OAL) = Cut Hose Length.
3. Prior to cutting the hose, measure and mark the cut length from one end of the hose.
4. Insert Fitting A onto the hose. From the cut mark, measurement to the end of Fitting A.
5. Crimp Fitting A and measurement of the growth of the fitting.
6. Take the growth length (x2) and subtract from the hose cut mark. This is the new cut mark.
7. Crimp Fitting B on the other end. Measure the OAL.



EXAMPLE

OAL = 18"

Cut-off factor (C1) for Fitting A = 1.5"

Cut-off factor (C2) for Fitting B = 1.5"

Total Cut-off factor = C1+C2 = 3"

Hose cut length = 15"

OAL – total cut off factor (C1+C2) = Cut Hose length

18"-3" = 15"



TECHNICAL

1. Prior to cutting the hose, measure and mark 15" from the end of the hose.
2. Insert Fitting A and prior to crimping, measure the from the cut mark to the end of the fitting.
 - Not pre-crimp measurement, 16-1/2"



EXAMPLE (CONTINUED)

3. Crimp Fitting A, measure from cut mark to end of crimped fitting, 16-5/8"



4. The Growth Length is the difference between the crimped and pre-crimp fitting measurement.
 - Crimped Fitting A measurement = 16 5/8"
 - Pre Crimp Fitting A measurement = 16 1/2"
 - Growth Length of Fitting A = 1/8"
 - Growth Length of Fitting A & B = 1/4"

5. Subtract 1/4" from the cut mark and cut hose



6. Insert Fitting B



7. Crimp Fitting B on the other end



8. Measure the OAL

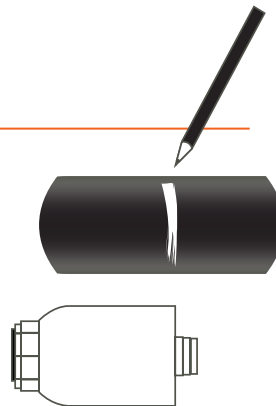
Cutting

Wire reinforced hydraulic hose should be cut with either a circular steel cutting wheel or a circular abrasive cutoff wheel. The preferred choice would be the steel wheel with a cooling agent. Overheating the hose, as it is cut, can cause deformation of the hose creating difficulty when assembling the hose fittings. For textile-reinforced hose, a guillotine style cutter may be used. Regardless of the cutting method used, the cut should always be perpendicular to the axis of the hose. Angled cuts will increase the likelihood that the hose end cannot be fully inserted into the hose.

Caution: When cutting hose always wear safety glasses and avoid loose fitting clothing. Hearing protection is also strongly recommended.

Insertion Depth

To determine the insertion depth of a hose fitting, first measure the distance from the bottom of the fitting to the end of the ferrule where the hose is to be inserted. Mark a line on the hose cover at the distance from the end of the hose that equals the insertion depth. This becomes a visual check to determine if the hose was fully bottomed in the fitting. Most hose and fitting suppliers provide information, which allows the calculation of correct insertion depth. See figure to the right.



Lubrication (As Needed)

It is sometimes difficult to insert a fitting into a hydraulic hose. When this occurs, it is recommended that SAE 10 W oil or another compatible lubricant be used to lubricate the hose. Make sure that the lubricant is compatible with both the hose and all other hydraulic system components.

Never dip the end of the hose into a container of oil or use a squirt can. Instead, put a thick sponge or other soft material in the bottom of a small tray (anything large enough to handle all sizes of hose in the work area. Before inserting the fitting into the hose, push approximately ½" (13 mm) of the end of the hose into the sponge in the tray of lubricant.

Verification of Full Fitting Insertion

Measuring and marking is the appropriate way of verifying the full insertion of the fitting; simply "feeling" it has been completely inserted is not sufficient. After lubricating the hose, grip firmly and push into the fitting. Fittings with an elbow configuration should point toward the curvature of the hose, unless



TECHNICAL



TECHNICAL

otherwise specified. If the insertion mark was applied correctly, you should now be able to determine if the fitting has been completely inserted. The depth mark should be aligned with the end of the ferrule.

Crimp Machine

In order to optimize the performance of the crimp machine, it is important to inspect the crimper periodically for wear and tear. Preventative maintenance is important for all types of machinery. Most crimpers are designed with components that required interval inspection and changing of wear parts. It is important to contact the crimp machine manufacturer or reference the crimper owner's manual for further details.

The crimp dies that come into contact with the fittings to be crimped should also be maintained and inspected for wear such as chipping and/or cracks. It is important to keep crimp dies free of debris before and after the crimping process.

A crimp machine that requires hydraulic oil should be inspected at an interval recommended by the manufacturer. Hydraulic oil not changed over a period of time may cause damage to the internal parts of a crimper. Some crimper models may also have oil filter that will require changing over a recommended interval.

When adding new hydraulic oil, the oil should be filtered through a 20 micron filter or finer to remove excess impurities and minimize build-up of debris in the hydraulic system.

Verify Crimp Dimensions (First Piece Only)

Insert the hose and fitting into the crimp machine, and perform the crimping/swaging operation as specified. Remove the crimped/swaged assembly and with the appropriate gauging tools, check the first part for correct crimp/swage diameter and location. If the crimp diameter and location are corrected, proceed to the next steps in assembly. It is recommended that a log of these crimp/swage measurements be kept for future reference. This will help with future fabrications and monitor tooling wear.

If there is an error, verify tooling and setup. Mark the needed adjustments and proceed. Any crimped/swaged part that cannot be brought without the specification must be discarded. Both over crimping/swaging and under-crimping /swaging can cause an assembly to fail. Crimp/swage diameter and location should be verified each time tooling is changed. This will ensure that the correct tooling and/or machine setting are used.

Hose Storage

Texcel recommends that the hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service. Store hose in a manner that facilitates age control and first-in, first-out usage based on manufacturing date on hose or hose assembly.

Hose and hose assemblies shall be stored in accordance with storage conditions defined in ISO 8331. When storing hose, take care to avoid damage that could reduce hose life, and follow the manufacturers' information for storage and shelf life, the following factors that can adversely affect hose products in storages and shelf life: temperature, ozone, oils, gasoline, kerosene or their vapors, corrosive liquids and fumes, rodents, humidity, ultraviolet light, solvents, insects, radioactive materials, direct sun or heat rays, acids, alkalis, sharp edges and abrasive surfaces, electric or strong magnetic fields, mold and fungi.

Consult a Texcel hydraulic specialists for the recommended shelf life of our hydraulic products.

IF THERE ARE QUESTIONS REGARDING THE QUALITY OR USABILITY OF HOSE OR HOSE ASSEMBLIES, EVALUATE APPROPRIATELY:

1. Flex the hose to the minimum bend radius and compare it with new hose. After flexing, examine the cover and tube for cracks. If any appear, no matter how small, reject the hose.
2. If the hose is wire reinforced, and the hose is unusually stiff, or a cracking sound is heard during flexing, check for corrosion by cutting away a section of the cover from a sample. Corrosion would be another reason for rejections.
3. If doubt still persists, contact hose assembler to conduct proof-pressure tests or any other tests needed to verify the hose quality.

Cleanliness

Modern hydraulics is defined as the use of confined liquid to transmit power, multiply force or produce motion. Clean hydraulic fluid is an integral part of a hydraulic system and contaminated fluid will reduce the service life of hydraulic systems. Therefore hose cleanliness is an important part of the fabrication of a hydraulic hose assembly.



TECHNICAL



TECHNICAL

THERE ARE 3 METHODS OF SPECIFYING CLEANLINESS:

1. Gravimetric analysis (reference ISO 4405)

ISO 4407 specifies a method to determine fluid contamination by filtering a volume of fluid under vacuum through 1 or 2 filter member.

2. Particle counting (reference ISO 4406)

ISO 4406 specifies a code of 3 scale numbers to measure the particle level in a fluid sample. The scale numbers are as follows:

- The first scale number represents the number of particles equal to larger to 4 microns per milliliter of fluid.
- The second scale number represents the number of particles equal or larger to 6 microns per milliliter of fluid.
- The third scale number represents the number of particles equal or larger to 14 microns per milliliter of fluid.

The scale code is represented, for example, as 18/16/12. The lower the scale code number, the cleaner the fluid.

3. Maximum particle size (reference ISO 4407)

ISO 4407 specifies methods to determine contamination levels in a hydraulic system by counting the particles trapped on a membrane filter using an optical microscope. Particles to 2 microns can be counted using this method.

The primary source of contamination in a hose assembly is a result of cutting the hose with both metal abrasive blades. Therefore it is recommended that the hose be cleaned immediately after cutting and again after the assembly because the secondary source of contamination is the fittings. This insures that all the contaminations generated during shop assembly have been removed.

Reason for Cleaning:

The cleaning process ensures that contamination generated during the assembly process has been removed. The primary source of contamination in a hydraulic hose assembly is the result of the cutting process with either a metal blade or abrasive wheel. Therefore it is recommended that the hose be cleaned immediately after the cutting process and always before stem insertion.

THE 3 MAIN REASONS FOR CLEANING THE HOSE AFTER THE CUTTING PROCESS ARE AS FOLLOWS:

1. Heat from the cutting process causes both rubber and metal particles to become very hot. As the particles cool they may stick or adhere to the tube thus becoming much more difficult to remove.
2. If the contaminants are trapped between the O.D. of the stem and the I.D. of the tube, they could act as an eventual leak path for hydraulic fluid when the system is under pressure.
3. Stem insertion is much more difficult when trying to push stems over or past the internal contamination. A clean tube is usually smooth and slippery in nature which means stem lubrication may not be necessary.



TECHNICAL

Stem insertion should be done as cleanly as possible. If lubricants are necessary, they should be kept clean and never stored in an open container, such as coffee can. Atmospheric contamination in the shop air will enter the open container and contaminate the lubricant. Never dunk the stem or hose into a lubricant as this will add contamination back into the cleaned piece of hose. Apply clean lubricants sparingly to the O.D. of the stem only.

During the crimping or swaging process, stem deformation occurs to insure the proper fitting retention. The crimping or swaging process may cause metal and plating flash to occur inside the stem. The hose assembly should go through a final cleaning process.

Immediately cap or plug each end of the hose to keep airborne contaminants from entering the clean hose assembly. Caps and plugs will protect the fitting threads and keep the assembly contamination free.

Other sources of contamination include dust, moisture and airborne particles that can enter a completed hose assembly. Customer requirements and the specific application will dictate the required cleanliness level.

Cleaning Methods:

1. Projectiles:

The projectile clean method requires clean, dry compressed air or an inert gas source such as nitrogen as the propellant. A pneumatic launcher then used for propelling the projectile through the hose or hose assembly. A virgin polyurethane foam projectile wipes the tube wall clean and pushes contamination out of the assembly.

2. Fluid Flushing:

Clean fluids that are compatible with the hose and tube stock can be flushed through the assembly to remove contamination. A flushing system that provides a high turbulent flow is desirable to make sure that the contamination is removed from the tube wall. The fluid flushing system should have filtration to ensure that the flushing fluids are clean. After flushing the hose assembly will then need to have the flushing fluid removed and the tube should be dry.

3. Air Blow:

Clean dry air can be used to blow loose particles of contamination from the hose or hose assembly. Long lengths of hose or hoses with inside diameters of more than a ½" may present a problem when using air only as the cleaning method.

The customers' cleanliness requirements and the specific application will dictate the required level of cleanliness and cleaning method. The only sure way to know if you are meeting a specific ISO, NAS or SAE cleanliness code is testing.



HOSE ASSEMBLY ROUTING TIPS

Proper hose installation is essential for satisfactory performance. If hose length is excessive, the appearance of the installation will be unsatisfactory and unnecessary cost of equipment will be involved. If hose assemblies are too short to permit adequate flexing and changes in length due to expansion or contraction, hose service life will be reduced.

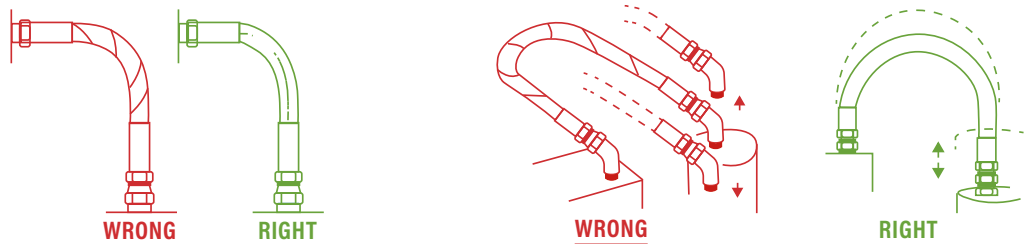
The following diagrams show proper hose installations which provide maximum performance and cost savings. Consider these examples in determine length of a specific assembly.

ADEQUATE LENGTH

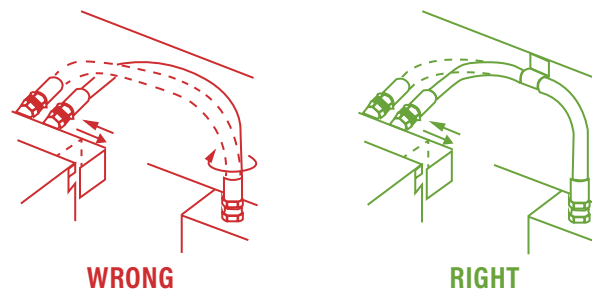
Allow additional hose length to compensate the length change effect during pressurization.



Do not twist and distort hose in the same plane as the motion of the port to which the hose is connected to. Allow additional hose length to avoid any twisting or distortion may occur during the motion in multi-planes.



Use clamp or any support device to secure the hose that flexing is in one plane only.





HOSE ASSEMBLY ROUTING TIPS

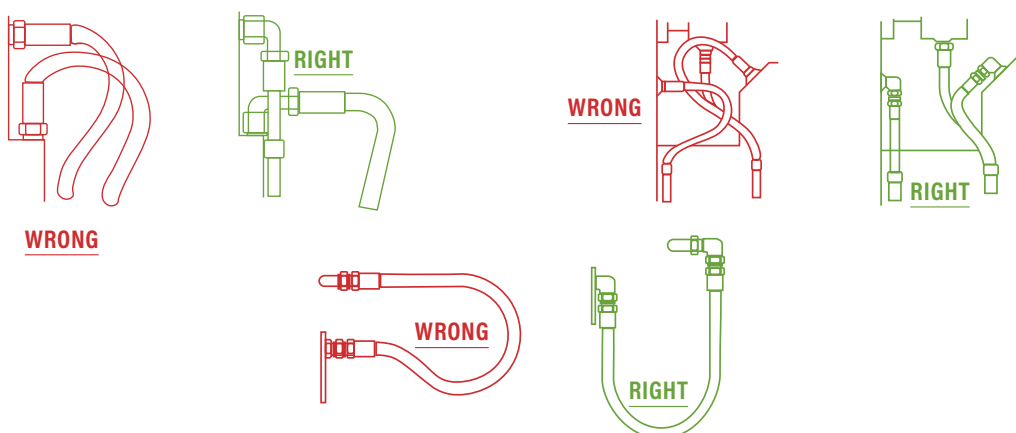
MAINTAIN PROPER BEND RADIUS

All minimum bend radius (BR) of hose are defined in the Texcel's hydraulic hose catalog. Improper routing, short hose cut length that lead to actual bend radius that is less than the recommended minimum bend radius, and sharp bending at the hose and fitting interface may result in leaking, hose rupture or fitting blow off.



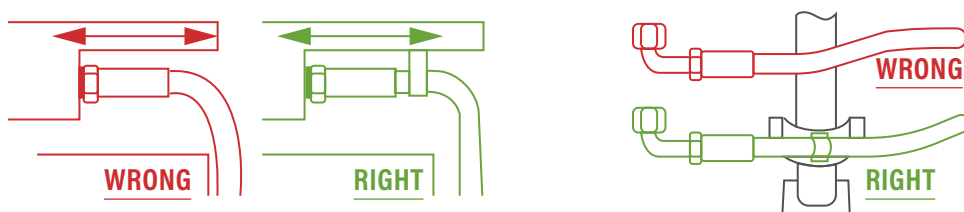
AVOID MECHANICAL STRAIN

Use elbows and adapters in the installation to relieve strain on the assembly and to provide easier and neater installations that are accessible for inspection and maintenance.



EXTERNAL PROTECTION

Install hose runs or use supports, such as clamps or bracket if necessary to avoid rubbing or abrasion.



Use hydraulic adaptor to reduce the pipe thread joints.





TECHNICAL

Recommended Items For Inspection

Item		Main Cause	Corrective Actions To Be Taken
Leakage from threaded connector		Defective connector seat due to presence of flaw, dirt or other foreign objects	Clean connector seat
		Loose connector or O-ring wear	Tighten the connector or replace O-ring
		Mismatching of seat surface	Replace the connector as necessary
Leakage from flange connection		Loose fixture bolt or deterioration of O-rings / seals	Tighten the bolt or replace O-rings / seals
Leakage from hose / fitting interface - hose fitting slippage on hose		Deterioration of hose (due to heat, oil, long use, etc.)	Replace the hose
		Improper routing	Avoid sharp bending at the assembly part
Deformation	(Kink or dent)	External impact	Impact prevention (protection) replace the defective hose
	(Swell, bulge)	Oil spillage (leak)	
Visible defect (damaged, cut or abraided cover; exposed reinforcement, kinked, crushed, flattened, or twisted hose; blistered, soft, degraded, or loose cover; cracked, damaged, or badly corroded hose fittings; wear flaws; scratch etc.)		Component interference External shocks	Impact prevention (protection) replacement
Visible external cracks		Ozone, radiation, paint, other fluids	Exterior protection replacement
Unusual hose movement at starting of operation		Improper hose length	Replace the hose
		Improper routing	Correct routing or use of adaptive devices
Hardening / softening, heat cracked, or charred hose		Deterioration due to fluid or temperature mismatch	Replacement as necessary
Unusual noise, odor, heat		Improper circuitry	Check the circuit
Rusting of joints		Sand dust, water, air salinity	Use of protective paint (but not on the exterior surface of the hose)
Product lifetime (useful service life has been reached)		Deterioration and wear	Replace hose and / or hose assembly based on criteria defined in clause 8

Citation: SAE J1273

Nomographic Chart

Flow Capacity of Hose Assemblies at Recommended Flow Velocities

Example 1: Flow Rate = 25 GPM

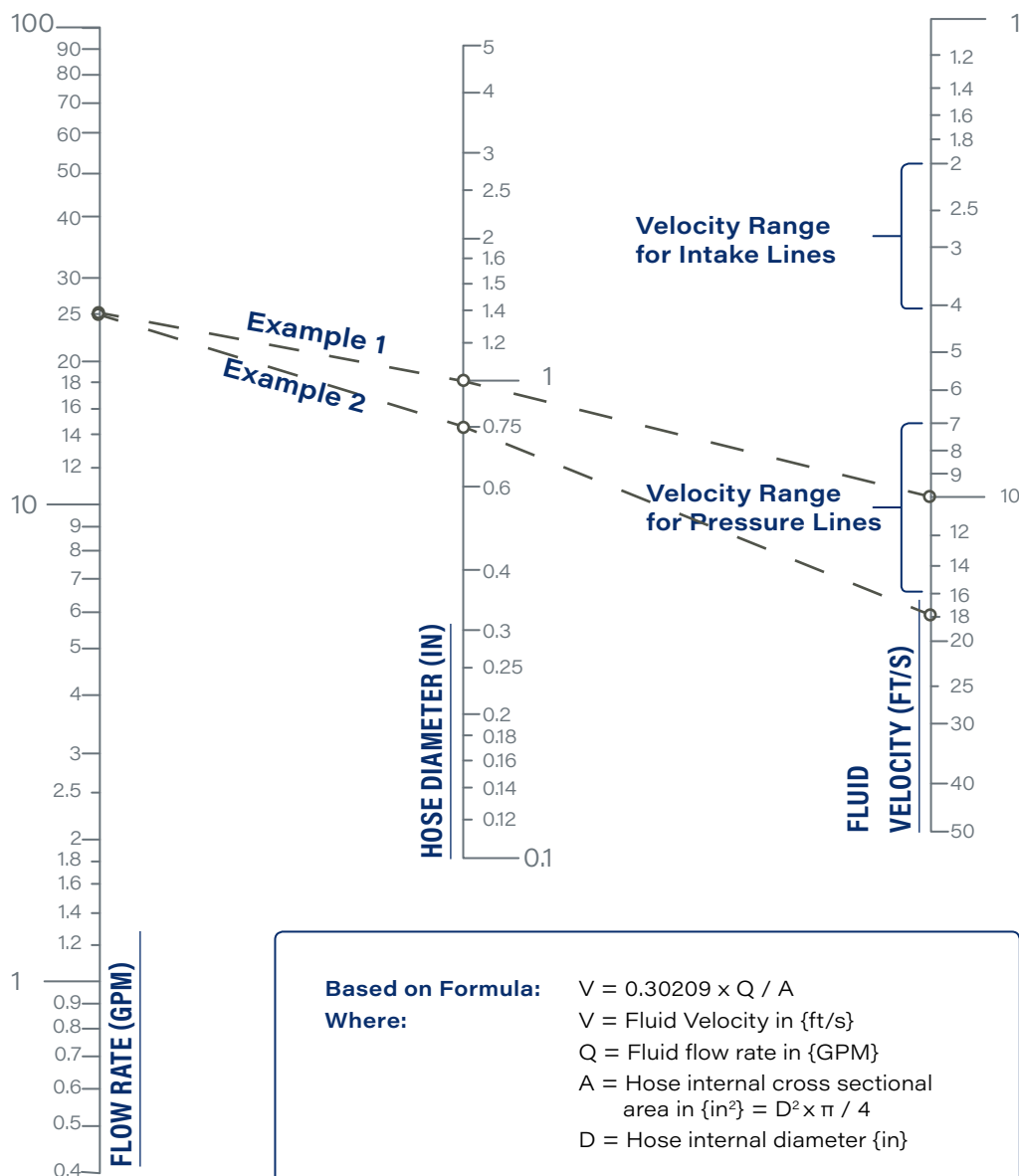
Velocity = 10 ft/s

Hose ID = 1"

Example 2: Flow Rate = 25 GPM

Velocity = 18 ft/s

Hose ID = .75"



TECHNICAL



CHEMICAL COMPATIBILITY

The following Chemical Resistance Chart assists in the selection of the proper elastomer for the application conditions. Chemical resistance charts are only a guide and should be used as such. The degree of resistance of an elastomer to a material depends upon variables such as temperature, concentration levels, working pressure, flow velocity, duration of use, among other variables. The compound should be tested under actual service conditions to ensure compatibility.

RATING GUIDE

- 1** = Excellent
2 = Good Compatibility
3 = Compatibility may affect the life of the hose
NC = Not Recommended

FLUID	SPIRAL	BRAIDED	HIGH TEMPERATURE	LOW TEMPERATURE	WATER BLAST	CLEANERS
Acetone	3	3	3	3	3	3
Agip Arnica 46	1	2	1	2	1	2
Agip Arnica Extra Plus	2	2	3	2	2	2
Agip Arnica Plus	1	1	1	1	1	1
Agip Arnica S46	1	1	2	1	1	1
Agip OSO 32	1	1	1	1	1	1
Agip SINT 2000	2	1	2	1	2	1
Agip Tec sint SL5W40	1	2	2	2	1	2
Air (100°C)	2	3	1	3	2	3
Air (150°C)	NC	NC	1	NC	NC	NC
Air (80°C)	2	2	1	2	2	2
Ammonia, gaseous	2	1	2	1	2	1
Ammonium Hydroxide, 10%	1	2	1	2	1	2
Ammonium nitrate (aqueous solutions)	2	2	2	2	2	2
Ammonium sulphate (aqueous solution)	1	1	1	1	1	1
Aniline	3	3	3	3	3	3
API HS 46	2	3	1	3	2	3
Aqua regia	3	3	NC	3	3	3
ARAL Vitam EHF 46	1	2	2	2	1	2
ASTM oil n°1, 100°C	1	1	1	1	1	1
ASTM oil n°2, 100°C	2	1	2	1	2	1
ASTM oil n°3, 100°C	1	1	2	1	1	1
Atlas Copco Roto H	2	2	1	2	2	2
Atlas Copco Roto Inject Fluid	1	2	2	2	1	2
Atlas Copco Roto Inject Fluid Plus	1	2	1	2	1	2
Avia HVI 46	2	2	1	2	2	2
Avia Syntofluid F 46	1	1	2	1	1	1
Avia Syntofluid N 32	2	1	2	1	2	1

RATING GUIDE

1 = Excellent

2 = Good Compatibility

3 = Compatibility may affect the life of the hose

NC = Not Recommended

FLUID	SPIRAL	BRAIDED	HIGH TEMPERATURE	LOW TEMPERATURE	WATER BLAST	CLEANERS
Avia Syntofluid PE B 50	2	3	2	3	2	3
Benzene	3	3	NC	3	3	3
Boric acid 10% 100°C	1	1	1	1	1	1
BP A 0629L/028	2	2	1	2	2	2
BP Biohyd SE-S 46	2	1	2	1	2	1
BP Vanellus C 5	1	2	2	2	1	2
Butanol	1	1	1	1	1	1
Calcium bicarbonate	1	1	1	1	1	1
Calcium hydroxide (Aqueous suspensions)	1	1	1	1	1	1
Carbonic anhydride	2	2	2	2	2	2
Castrol Aero HF 585 B	1	2	2	2	1	2
Castrol Anvol SWX 68	1	1	2	1	1	1
Castrol Biotech Alpin 22	1	1	3	1	1	1
Castrol Carelube HTG	2	2	2	2	2	2
Castrol Hyspin HDH 7000	1	1	1	1	1	1
Castrol Lift oil	2	2	2	2	2	2
Castrol PRODUCT L 571	1	2	2	2	1	2
CastrolTransynd RD	2	2	1	2	2	2
CEPSA Hydraulico HM 46	1	2	1	2	1	2
Chevron Hydraulic AW 46	1	2	2	2	1	2
Chevron Rycon MV	1	2	2	2	1	2
Citric Acid, 33%	2	2	2	2	2	2
Crude oil	1	1	3	1	1	1
Dibenzyl ether	NC	NC	NC	NC	NC	NC
Dibutyl phtalate (DBP)	3	3	NC	3	3	3
Diesel fuel (70°C)	2	2	3	2	2	2
Diesel fuel Bio RME	3	3	NC	3	3	3
Esso Nuto H46	2	2	1	2	2	2
Esso Unavis N46	1	2	1	2	1	2
Ethyl acetate	3	3	3	3	3	3
Ethyl alcohol	1	1	1	1	1	1
Ethylene glycole	1	1	2	1	1	1
Ethylene glycole (100°C)	1	1	2	1	1	1
Exxon HUMBLE H 46	1	2	1	2	1	2



CHEMICAL COMPATIBILITY



CHEMICAL COMPATIBILITY

RATING GUIDE

1 = Excellent

2 = Good Compatibility

3 = Compatibility may affect the life of the hose

NC = Not Recommended

FLUID	SPIRAL	BRAIDED	HIGH TEMPERATURE	LOW TEMPERATURE	WATER BLAST	CLEANERS
Exxon Mobil 424	2	2	2	2	2	2
Formaldehyde	3	3	3	3	3	3
Fuchs Eco Hyd 46 S NWG	2	2	3	2	2	2
Fuchs Planto Hytrac	2	2	2	2	2	2
Fuchs Planto hyd 46s	1	1	2	1	1	1
Fuchs Planto hyd N 46	2	1	1	1	2	1
Fuchs PLANTOHYD SUPER S46	2	2	3	2	2	2
Fuchs Plantosyn 3268 Eco	2	1	1	1	2	1
Fuchs Plantosyn 46 HVI	2	3	2	3	2	3
Fuchs Renolin MR 520	2	1	2	1	2	1
Glycerine	1	1	1	1	1	1
GULF Armony AW 46	1	2	1	2	1	2
Heptane	1	1	3	1	1	1
HOUGHTON Cosmolubric HF 130	2	2	3	2	2	2
IDEMITSU DAPHNE 46	2	2	1	2	2	2
Igol ZNS 46	1	2	1	2	1	2
Igol Matic fluid bio 46	1	2	1	2	1	2
Igol TICMA FLUID BIO 46	2	2	3	2	2	2
Ingersoll Rand SSR Ultra plus coolant	2	2	1	2	2	2
Ingersoll Rand Ultra Plus Coolant	2	2	1	2	2	2
IP HYDRUS 46	1	2	1	2	1	2
IP Trasmission Fluid DX	1	1	1	1	1	1
IRVING HYDRAULICS 46	2	2	1	2	2	2
ISAFLEX KOMPRESSOIL SE	1	2	3	2	1	2
Isobutyl alcohol	2	2	1	2	2	2
Iso-octane	1	1	2	1	1	1
Isopropyl alcohol	2	2	1	2	2	2
J. Deere Biohygard II	1	1	1	1	1	1
KLUBER HYSYN FG46	2	3	2	3	2	3
KLUBER SUMMIT HYSYN FG 46	2	2	2	2	2	2
KOMATSU Genuine Bio 46 G4	1	1	1	1	1	1
Lead free petrol	1	1	3	1	1	1
Magnesium acetate solution	1	1	1	1	1	1
Magnesium hydroxide (aqueous solutions)	2	2	1	2	2	2

RATING GUIDE

1 = Excellent

2 = Good Compatibility

3 = Compatibility may affect the life of the hose

NC = Not Recommended

FLUID	SPIRAL	BRAIDED	HIGH TEMPERATURE	LOW TEMPERATURE	WATER BLAST	CLEANERS
MAV Sint Plus 2005 ISO46	2	3	3	3	2	3
Methanol	2	2	1	2	2	2
Methyl methacrylate	NC	NC	NC	NC	NC	NC
MILLERS Millfood 32	2	2	1	2	2	2
Mobil Aero HF MIL H5606	1	2	2	2	1	2
Mobil Arctic EAL 22	1	2	2	2	1	2
Mobil DTE 10 EXCEL	1	3	2	3	1	3
Mobil DTE 13	1	2	1	2	1	2
Mobil DTE 25	2	2	1	2	2	2
Mobil DTE 26	2	2	1	2	2	2
Mobil DTE EXCEL 46	2	2	1	2	2	2
Mobil Hydrofluid HF DU	1	1	2	1	1	1
Mobil Jet oil II	2	2	3	2	2	2
Mobil SHC 524	1	2	1	2	1	2
Mobil Therm 605	2	2	1	2	2	2
Neste BIO Hydraul LONGLIFE 46	2	2	3	2	2	2
Neste Biohydraul SE 46	1	1	2	1	1	1
Neste HYDRAULI 32 SUPER	1	3	1	3	1	3
Neste HYDRAULI 46 SUPER	1	3	1	3	1	3
Nitrogen	2	2	2	2	2	2
Oleic acid	3	3	2	3	3	3
OMV HLP AL 46	1	2	1	2	1	2
Panolin EP Gear Synth 30 VDT	2	2	3	2	2	2
Paraffin	1	1	1	1	1	1
Pentane	1	1	3	1	1	1
PENTOSIN CHF 11 S (ATF fluid)	2	3	1	3	2	3
Petrol	1	1	3	1	1	1
Phenol	3	3	3	3	3	3
Phosphoric acid 20%	2	2	3	2	2	2
Polypropylene glycol	2	2	2	2	2	2
Potassium bromide	1	1	1	1	1	1
Potassium chloride (aqueous solution)	1	1	1	1	1	1
Potassium sulphate (aqueous solution)	1	1	1	1	1	1
Q8 Handel 68	2	3	1	3	2	3



CHEMICAL COMPATIBILITY



CHEMICAL COMPATIBILITY

RATING GUIDE

1 = Excellent

2 = Good Compatibility

3 = Compatibility may affect the life of the hose

NC = Not Recommended

FLUID	SPIRAL	BRAIDED	HIGH TEMPERATURE	LOW TEMPERATURE	WATER BLAST	CLEANERS
Q8 Heller 46	1	2	1	2	1	2
Q8 Hogart 46	2	3	2	3	2	3
Q8 Holbein	1	2	2	2	1	2
Q8 T720 15W-40	1	2	1	2	1	2
QUAKER Greensave N 40	2	2	3	2	2	2
RAUTIO ERGO MIX	2	3	1	3	2	3
Sea water	1	1	3	1	1	1
SHAFFER 112 HTC	2	2	1	2	2	2
SHAFFER 275S DILEX SUPREME MEHF HYD	2	3	1	3	2	3
Shell HF-E-46	1	1	1	1	1	1
Shell Arctic 32	2	1	2	1	2	1
Shell ATF III	1	2	1	2	1	2
Shell Cassida HF 46	2	2	1	2	2	2
Shell Corena D	2	2	1	2	2	2
Shell Donax TD	1	2	1	2	1	2
Shell Helix Ultra 5W40	2	2	1	2	2	2
Shell Iru Fluid DU-NA 68	2	2	2	2	2	2
Shell NATURELLE HF-E15	1	2	2	2	1	2
Shell Rimula R3	1	2	1	2	1	2
Shell Rimula X30	2	2	1	2	2	2
Shell Tegula V32	1	2	1	2	1	2
Shell Tellus 100	2	2	1	2	2	2
Shell Tellus 42	1	2	1	2	1	2
Shell Tellus 46	1	2	1	2	1	2
Shell Tellus 68	1	2	1	2	1	2
Shell Tellus EE	1	3	2	3	1	3
Shell Tellus S 46	1	2	1	2	1	2
Shell Tellus T 32	1	2	1	2	1	2
Shell Tellus T 46	1	2	1	2	1	2
Shell Tellus T 68	1	2	1	2	1	2
Shell Tellus TX 68	2	2	2	2	2	2
Shell V oil 1404	2	2	2	2	2	2
Soaps	1	1	2	1	1	1
Soda	2	2	2	2	2	2

RATING GUIDE

1 = Excellent

2 = Good Compatibility

3 = Compatibility may affect the life of the hose

NC = Not Recommended

FLUID	SPIRAL	BRAIDED	HIGH TEMPERATURE	LOW TEMPERATURE	WATER BLAST	CLEANERS
Sodium bicarbonate	1	1	1	1	1	1
Sodium chloride (aqueous solution)	1	1	1	1	1	1
Sodium silicate (aqueous solutions)	1	1	1	1	1	1
Sodium sulphide	1	1	1	1	1	1
SOLUTIA Skydroll 500	NC	NC	NC	NC	NC	NC
Stearic acid	1	1	1	1	1	1
TAMOIL ATF II D	2	2	2	2	2	2
Tannic acid	3	3	2	3	3	3
Tannin	1	1	1	1	1	1
Tartaric acid 20%	1	1	2	1	1	1
TEBOIL Eco 46	1	2	3	2	1	2
TEBOIL Hydraulic arctic	2	1	2	1	2	1
Tetraethyl lead	2	2	3	2	2	2
Texaco Biostar Hydraulic 32	1	1	2	1	1	1
Texaco Rando HD 46	1	2	1	2	1	2
Toluene	3	3	NC	3	3	3
Total Biohydran SE 46	1	2	3	2	1	2
Total DACNIS SH 46	2	2	2	2	2	2
Total Dacnis VS 45	2	3	1	3	2	3
Unil HYDRO S46	2	2	1	2	2	2
Unil OPAL HV 46	2	2	1	2	2	2
Unil OPAL HVB 46	2	2	1	2	2	2
Urea	1	1	2	1	1	1
Valvoline ulramax HVLP 68	2	3	1	3	2	3
Vinyl acetate	1	1	1	1	1	1
Vinyl chloride	NC	NC	NC	NC	NC	NC
Water	1	1	3	1	1	1
Water Glycol emulsion (50%)	1	1	NC	1	1	1
Zinc chloride (aqueous solutions)	1	1	1	1	1	1
Zinc sulphate (aqueous solutions)	1	1	1	1	1	1



CHEMICAL COMPATIBILITY



TORQUE SPECIFICATION FOR CARBON STEEL

JIC-SAE J514 37 DEGREE FLARE END

Dash Size	Nominal Size (in)	Recommended Torque (lb.ft)	
		Min	Max
4	1/4	11	12
5	5/16	14	15
6	3/8	18	20
8	1/2	36	39
10	5/8	57	63
12	3/4	79	88
16	1	108	113
20	1 1/4	127	133
24	1 1/2	158	167
32	2	245	258

O RING FACE SEAL - SAE J1453

Dash Size	Nominal Size (in)	Recommended Torque (lb.ft)	
		Min	Max
4	1/4	10	12
6	3/8	18	20
8	1/2	32	35
10	5/8	46	50
12	3/4	65	70
14	7/8	65	70
16	1	92	100
20	1 1/4	125	140
24	1 1/2	150	165

CODE 61 FLANGE - SAE J518

Dash Size	Nominal Size (in)	Recommended Torque (lb.ft)	
		Min	Max
8	1/2	15	19
12	3/4	21	29
16	1	27	35
20	1 1/4	35	46
24	1 1/2	46	58
32	2	54	66

CODE 62 FLANGE - SAE J518

Dash Size	Nominal Size (in)	Recommended Torque (lb.ft)	
		Min	Max
8	1/2	15	19
12	3/4	25	33
16	1	42	50
20	1 1/4	62	75
24	1 1/2	116	133
32	2	199	216

BSPP AND BSPP WITH O-RING

Dash Size	Nominal Size (in)	Recommended Torque (lb.ft)	
		Min	Max
2	1/8	7	9
4	1/4	11	18
6	3/8	20	30
8	1/2	31	56
10	5/8	32	69
12	3/4	70	100
16	1	85	122
20	1 1/4	103	207
24	1 1/2	159	258
32	2	221	332

All fittings are recommended for specified pressure rating. Consult a Texcel hydraulic specialist for details.



COMPRESSED SHEET



SHEET RUBBER



SKIRTBOARD



METRIC CONVERSION CHART AND TABLE

LENGTH

1 centimeter (cm)	=	10 millimeters (mm)
1 inch	=	2.54 centimeters (cm)
1 foot	=	0.3048 meters (m)
1 foot	=	12 inches
1 yard	=	3 feet
1 meter (m)	=	100 centimeters (cm)
1 meter (m)	=	3.280 feet
1 furlong	=	660 feet
1 kilometer (km)	=	1000 meters (m)
1 kilometer (km)	=	0.621 miles
1 mile	=	5280 ft
1 mile	=	1.609 kilometers (km)
1 nautical mile	=	1.852 kilometers (km)

AREA

1 square foot	=	144 square inches
1 square foot	=	929.030 square centimeters
1 square yard	=	9 square feet
1 square meter	=	10.763 square feet
1 acre	=	43,560 square feet
1 hectare	=	10,000 square meters
1 hectare	=	2.471 acres
1 square kilometer	=	100 hectares
1 square mile	=	2.589 square kilometers
1 square mile	=	640 acres

SPEED

1 mile per hour	=	1.466 feet per second
1 mile per hour	=	1.609 kilometers per hour
1 knot	=	1.150 miles per hour
1 foot per second	=	0.681 miles per hour
1 kilometer per hour	=	0.621 miles per hour

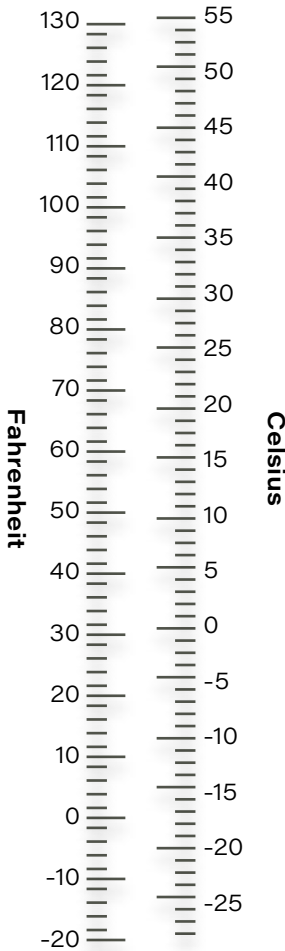
VOLUME

1 US tablespoon	=	3 US teaspoons
1 US fluid ounce	=	29.573 milliliters (ml)
1 US cup	=	16 US tablespoons
1 US cup	=	8 US fluid ounces
1 US pint	=	2 US cups
1 US pint	=	16 US fluid ounces
1 liter (l)	=	33.814 US fluid ounces
1 liter (l)	=	1000 milliliters (ml)
1 US quart	=	2 US pints
1 US gallon	=	4 US quarts
1 US gallon	=	3.78541178 liters

WEIGHT

1 milligram (mg)	=	0.001 grams (g)
1 gram (g)	=	0.001 kilograms (kg)
1 gram (g)	=	0.035 ounces
1 ounce	=	28.349 grams (g)
1 ounce	=	0.0625 pounds
1 pound (lb)	=	16 ounces
1 pound (lb)	=	0.453 kilograms (kg)
1 kilogram (kg)	=	1000 grams
1 kilogram (kg)	=	35.273 ounces
1 kilogram (kg)	=	2.204 pounds (lb)
1 stone	=	14 pounds
1 short ton	=	2000 pounds
1 metric ton	=	1000 kilograms (kg)

TEMPERATURE





PRESSURE UNITS CONVERSION CHART

PSI	Bar	Mpa
100	6.90	0.69
200	13.79	1.38
300	20.69	2.07
400	27.59	2.76
500	34.48	3.45
600	41.38	4.14
700	48.28	4.83
800	55.17	5.52
900	62.07	6.21
1000	68.97	6.89
1100	75.86	7.58
1200	82.76	8.27
1300	89.66	8.96
1400	96.55	9.65
1500	103.45	10.34
1600	110.34	11.03
1700	117.24	11.72
1800	124.14	12.41
1900	131.03	13.10
2000	137.93	13.79
2100	144.83	14.48
2200	151.72	15.17
2300	158.62	15.86
2400	165.52	16.55
2500	172.41	17.24
2600	179.31	17.93
2700	186.21	18.62
2800	193.10	19.31
2900	200.00	19.99
3000	206.90	20.68
3100	213.79	21.37
3200	220.69	22.06
3300	227.59	22.75
3400	234.48	23.44
3500	241.38	24.13
3600	248.28	24.82
3700	255.17	25.51
3800	262.07	26.20
3900	268.97	26.89
4000	275.86	27.58

PSI	Bar	Mpa
4100	282.76	28.27
4200	289.66	28.96
4300	296.55	29.65
4400	303.45	30.34
4500	310.34	31.03
4600	317.24	31.72
4700	324.14	32.41
4800	331.03	33.09
4900	337.93	33.78
5000	344.83	34.47
5100	351.72	35.16
5200	358.62	35.85
5300	365.52	36.54
5400	372.41	37.23
5500	379.31	37.92
5600	386.21	38.61
5700	393.10	39.30
5800	400.00	39.99
5900	406.90	40.68
6000	413.79	41.37
6100	420.69	42.06
6200	427.59	42.75
6300	434.48	43.44
6400	441.38	44.13
6500	448.28	44.82
6600	455.17	45.51
6700	462.07	46.19
6800	468.97	46.88
6900	475.86	47.57
7000	482.76	48.26
7100	489.66	48.95
7200	496.55	49.64
7300	503.45	50.33
7400	510.34	51.02
7500	517.24	51.71
7600	524.14	52.40
7700	531.03	53.09
7800	537.93	53.78
7900	544.83	54.47
8000	551.72	55.16

PSI	Bar	Mpa
8100	558.62	55.85
8200	565.52	56.54
8300	572.41	57.23
8400	579.31	57.92
8500	586.21	58.61
8600	593.10	59.29
8700	600.00	59.98
8800	606.90	60.67
8900	613.79	61.36
9000	620.69	62.05
9100	627.59	62.74
9200	634.48	63.43
9300	641.38	64.12
9400	648.28	64.81
9500	655.17	65.50
9600	662.07	66.19
9700	668.97	66.88
9800	675.86	67.57
9900	682.76	68.26
10000	689.66	68.95
10100	696.55	69.64
10200	703.45	70.33
10300	710.34	71.02
10400	717.24	71.71
10500	724.14	72.39
10600	731.03	73.08
10700	737.93	73.77
10800	744.83	74.46
10900	751.72	75.15
11000	758.62	75.84
11100	765.52	76.53
11200	772.41	77.22
11300	779.31	77.91
11400	786.21	78.60
11500	793.10	79.29
11600	800.00	79.98
11700	806.90	80.67
11800	813.79	81.36
11900	820.69	82.05
12000	827.59	82.74

1 PSI = 0.06896 Bar
1 Bar = 14.5038 PSI

1 PSI = 0.006896 Mpa
1 Mpa = 145.038 PSI



INDEX

BR14-4.....	38	F2-0406-BSPFS90.....	96	F2-0604-PMS.....	59
BR14-6.....	38	F2-0406-JFS.....	64	F2-0605-MFL.....	88
BR14-8.....	38	F2-0406-JFS45M.....	66	F2-0606-BFS.....	94
BR14-10.....	38	F2-0406-JFS90L.....	69	F2-0606-BPM.....	92
BR14-12.....	38	F2-0406-JFS90M.....	67	F2-0606-BRF.....	87
BR14-16.....	38	F2-0406-JM.....	63	F2-0606-BSPFS45.....	95
F2-0402-BFS.....	94	F2-0406-OBM.....	78	F2-0606-BSPFS90.....	96
F2-0402-BPM.....	92	F2-0406-OFS.....	74	F2-0606-BSPFS90-B.....	97
F2-0402-PM.....	56	F2-0406-OFS45M.....	75	F2-0606-BTM.....	93
F2-0402-PMS.....	59	F2-0406-OFS90L.....	77	F2-0606-JFS.....	64
F2-0404-BFS.....	94	F2-0406-OFS90M.....	76	F2-0606-JFS45M.....	66
F2-0404-BPM.....	92	F2-0406-OM.....	73	F2-0606-JFS90L.....	69
F2-0404-BRF.....	87	F2-0406-PF.....	61	F2-0606-JFS90M.....	67
F2-0404-BSPFS45.....	95	F2-0406-PM.....	56	F2-0606-JFS90M-S.....	68
F2-0404-BSPFS90.....	96	F2-0406-PMS.....	59	F2-0606-JFS-S.....	65
F2-0404-BSPFS90-B.....	97	F2-0406-PM-X.....	58	F2-0606-JISS.....	106
F2-0404-BTM.....	93	F2-0406-SFS.....	71	F2-0606-JM.....	63
F2-0404-JFS.....	64	F2-0408-FG.....	90	F2-0606-JNR.....	89
F2-0404-JFS45M.....	66	F2-0408-JFS.....	64	F2-0606-MFL.....	88
F2-0404-JFS90L.....	69	F2-0408-PM.....	56	F2-0606-MIS.....	84
F2-0404-JFS90M.....	67	F2-0412-DLFS.....	99	F2-0606-MIS45.....	85
F2-0404-JFS90M-S.....	68	F2-0412-DLFS45.....	100	F2-0606-MIS90.....	86
F2-0404-JFS-S.....	65	F2-0412-DLFS90.....	101	F2-0606-OBM.....	78
F2-0404-JISS.....	106	F2-0412-DLM.....	98	F2-0606-OBMS.....	79
F2-0404-JM.....	63	F2-0414-DHFS.....	103	F2-0606-OBMS90.....	80
F2-0404-JNR.....	89	F2-0414-DHFS45.....	104	F2-0606-OFS.....	74
F2-0404-MFL.....	88	F2-0414-DHFS90.....	105	F2-0606-OFS45M.....	75
F2-0404-MIS.....	84	F2-0414-DLFS.....	99	F2-0606-OFS90L.....	77
F2-0404-MIS90.....	86	F2-0414-DLFS45.....	100	F2-0606-OFS90M.....	76
F2-0404-OBM.....	78	F2-0414-DLFS90.....	101	F2-0606-OM.....	73
F2-0404-OBMS.....	79	F2-0414-DLM.....	98	F2-0606-PF.....	61
F2-0404-OFS.....	74	F2-0414-KFS.....	107	F2-0606-PFS.....	62
F2-0404-OFS45M.....	75	F2-0414-KFS45.....	108	F2-0606-PM.....	56
F2-0404-OFS90L.....	77	F2-0414-KFS90.....	109	F2-0606-PM-S.....	57
F2-0404-OFS90M.....	76	F2-0416-DHFS.....	103	F2-0606-PMS.....	59
F2-0404-OM.....	73	F2-0416-DHFS45.....	104	F2-0606-PMS90.....	60
F2-0404-PF.....	61	F2-0416-DHFS90.....	105	F2-0606-PM-X.....	58
F2-0404-PFS.....	62	F2-0416-DHM.....	102	F2-0606-SFS.....	71
F2-0404-PM.....	56	F2-0416-DLFS.....	99	F2-0606-SFS90.....	72
F2-0404-PM-S.....	57	F2-0416-DLFS90.....	101	F2-0606-SM.....	70
F2-0404-PMS.....	59	F2-0416-DLM.....	98	F2-0608-BFS.....	94
F2-0404-PMS90.....	60	F2-0418-DHFS.....	103	F2-0608-BPM.....	92
F2-0405-JFS.....	64	F2-0418-DHFS45.....	104	F2-0608-BSPFS90.....	96
F2-0405-JFS45M.....	66	F2-0418-DHFS90.....	105	F2-0608-BTM.....	93
F2-0405-JFS90M.....	67	F2-0418-DHM.....	102	F2-0608-JFS.....	64
F2-0405-JM.....	63	F2-0422-PWFS.....	91	F2-0608-JFS45M.....	66
F2-0405-MFL.....	88	F2-0604-BFS.....	94	F2-0608-JFS90L.....	69
F2-0405-OBM.....	78	F2-0604-JFS.....	64	F2-0608-JFS90M.....	67
F2-0406-BFS.....	94	F2-0604-PM.....	56	F2-0608-JM.....	63



INDEX

F2-0608-MFL.....	88	F2-0808-BSPFS90.....	96	F2-0812-JFS.....	64
F2-0608-OBM.....	78	F2-0808-BTM.....	93	F2-0812-JM.....	63
F2-0608-OBMS.....	79	F2-0808-FL.....	81	F2-0812-OBM.....	78
F2-0608-OBMS90.....	80	F2-0808-FL45.....	82	F2-0812-OFS.....	74
F2-0608-OFS.....	74	F2-0808-FL90.....	83	F2-0812-PM.....	56
F2-0608-OFS45M.....	75	F2-0808-JFS.....	64	F2-0822-DLFS.....	99
F2-0608-OFS90L.....	77	F2-0808-JFS45M.....	66	F2-0822-DLFS90.....	101
F2-0608-OFS90M.....	76	F2-0808-JFS90L.....	69	F2-0822-DLM.....	98
F2-0608-OM.....	73	F2-0808-JFS90M.....	67	F2-0822-KFS.....	107
F2-0608-PF.....	61	F2-0808-JFS90M-S.....	68	F2-0822-KFS45.....	108
F2-0608-PFS.....	62	F2-0808-JFS-S.....	65	F2-0822-KFS90.....	109
F2-0608-PM.....	56	F2-0808-JISS.....	106	F2-0824-DHFS.....	103
F2-0608-PMS.....	59	F2-0808-JM.....	63	F2-0824-DHFS45.....	104
F2-0610-JFS.....	64	F2-0808-JNR.....	89	F2-0824-DHFS90.....	105
F2-0610-JM.....	63	F2-0808-MFL.....	88	F2-0824-DHM.....	102
F2-0610-OBM.....	78	F2-0808-MIS.....	84	F2-0824-KFS.....	107
F2-0610-OBMS90.....	80	F2-0808-OBM.....	78	F2-0826-DLFS.....	99
F2-0616-DLFS.....	99	F2-0808-OBMS.....	79	F2-0826-DLFS45.....	100
F2-0616-DLFS45.....	100	F2-0808-OBMS90.....	80	F2-0826-DLFS90.....	101
F2-0616-DLFS90.....	101	F2-0808-OFS.....	74	F2-0826-DLM.....	98
F2-0616-DLM.....	98	F2-0808-OFS45M.....	75	F2-1008-JFS.....	64
F2-0618-DLFS.....	99	F2-0808-OFS90L.....	77	F2-1008-JFS90M.....	67
F2-0618-DLFS45.....	100	F2-0808-OFS90M.....	76	F2-1008-PM.....	56
F2-0618-DLFS90.....	101	F2-0808-OM.....	73	F2-1010-BFS.....	94
F2-0618-DLM.....	98	F2-0808-PF.....	61	F2-1010-BRF.....	87
F2-0618-KFS.....	107	F2-0808-PFS.....	62	F2-1010-BSPFS45.....	95
F2-0618-KFS45.....	108	F2-0808-PM.....	56	F2-1010-BSPFS90.....	96
F2-0618-KFS90.....	109	F2-0808-PM-S.....	57	F2-1010-BTM.....	93
F2-0620-DHFS.....	103	F2-0808-PMS.....	59	F2-1010-JFS.....	64
F2-0620-DHFS45.....	104	F2-0808-PMS90.....	60	F2-1010-JFS45M.....	66
F2-0620-DHFS90.....	105	F2-0810-BFS.....	94	F2-1010-JFS90L.....	69
F2-0620-DHM.....	102	F2-0810-BSPFS90.....	96	F2-1010-JFS90M.....	67
F2-0622-DHFS.....	103	F2-0810-JFS.....	64	F2-1010-JM.....	63
F2-0622-DHFS45.....	104	F2-0810-JFS45M.....	66	F2-1010-JNR.....	89
F2-0622-DHFS90.....	105	F2-0810-JFS90L.....	69	F2-1010-KFL.....	81
F2-0622-DHM.....	102	F2-0810-JFS90M.....	67	F2-1010-KFL90.....	83
F2-0622-DLM.....	98	F2-0810-JM.....	63	F2-1010-OBM.....	78
F2-0622-KFS.....	107	F2-0810-MFL.....	88	F2-1010-OBMS.....	79
F2-0622-PWFS.....	91	F2-0810-OBM.....	78	F2-1010-OFS.....	74
F2-0806-BFS.....	94	F2-0810-OBMS.....	79	F2-1010-OFS45M.....	75
F2-0806-JFS.....	64	F2-0810-OBMS90.....	80	F2-1010-OFS90L.....	77
F2-0806-OFS.....	74	F2-0810-OFS.....	74	F2-1010-OFS90M.....	76
F2-0806-OFS45M.....	75	F2-0810-OFS45M.....	75	F2-1010-OM.....	73
F2-0806-PM.....	56	F2-0810-OFS90L.....	77	F2-1012-BFS.....	94
F2-0806-PMS.....	59	F2-0810-OFS90M.....	76	F2-1012-JFS.....	64
F2-0808-BFS.....	94	F2-0810-OM.....	73	F2-1012-JFS45M.....	66
F2-0808-BPM.....	92	F2-0812-FL.....	81	F2-1012-JFS90L.....	69
F2-0808-BRF.....	87	F2-0812-FL45.....	82	F2-1012-JFS90M.....	67
F2-0808-BSPFS45.....	95	F2-0812-FL90.....	83	F2-1012-JM.....	63



INDEX

F2-1012-OBM.....	78	F2-1212-PF.....	61	F2-1616-FL90.....	83
F2-1012-OFS.....	74	F2-1212-PFS.....	62	F2-1616-JFS.....	64
F2-1012-OFS45M.....	75	F2-1212-PM.....	56	F2-1616-JFS45M.....	66
F2-1012-OFS90L.....	77	F2-1212-PM-S.....	57	F2-1616-JFS90L.....	69
F2-1012-OFS90M.....	76	F2-1212-PMS.....	59	F2-1616-JFS90M.....	67
F2-1012-OM.....	73	F2-1212-PMS90.....	60	F2-1616-JFS90M-S.....	68
F2-1012-PM.....	56	F2-1212-SFS.....	71	F2-1616-JFS-S.....	65
F2-1024-KFS.....	107	F2-1212-SM.....	70	F2-1616-JISS.....	106
F2-1024-KFS45.....	108	F2-1214-JFS.....	64	F2-1616-JM.....	63
F2-1024-KFS90.....	109	F2-1214-JM.....	63	F2-1616-JNR.....	89
F2-1026-DLFS.....	99	F2-1216-FL.....	81	F2-1616-MFL.....	88
F2-1026-DLFS45.....	100	F2-1216-FL45.....	82	F2-1616-OBM.....	78
F2-1026-DLFS90.....	101	F2-1216-FL90.....	83	F2-1616-OFS.....	74
F2-1026-DLM.....	98	F2-1216-JFS.....	64	F2-1616-OFS45M.....	75
F2-1030-DHFS.....	103	F2-1216-JFS45M.....	66	F2-1616-OFS90L.....	77
F2-1030-DHFS45.....	104	F2-1216-JFS90M.....	67	F2-1616-OFS90M.....	76
F2-1030-DHFS90.....	105	F2-1216-JM.....	63	F2-1616-OM.....	73
F2-1030-DHM.....	102	F2-1216-OBM.....	78	F2-1616-PFS.....	62
F2-1208-PM.....	56	F2-1216-OFS.....	74	F2-1616-PM.....	56
F2-1210-JFS.....	64	F2-1216-OFS45M.....	75	F2-1616-PM-S.....	57
F2-1210-JFS90M.....	67	F2-1216-OFS90L.....	77	F2-1616-PMS.....	59
F2-1210-OFS.....	74	F2-1216-OFS90M.....	76	F2-1620-FL45.....	82
F2-1212-BFS.....	94	F2-1216-OM.....	73	F2-1620-FL90.....	83
F2-1212-BPM.....	92	F2-1216-PM.....	56	F2-1620-JFS.....	64
F2-1212-BRF.....	87	F2-1224-KFS.....	107	F2-1620-JFS90M.....	67
F2-1212-BSPFS45.....	95	F2-1230-DHFS.....	103	F2-1620-JM.....	63
F2-1212-BSPFS90.....	96	F2-1230-DHFS45.....	104	F2-1620-PM.....	56
F2-1212-BTM.....	93	F2-1230-DHFS90.....	105	F2-1633-KFS.....	107
F2-1212-FL.....	81	F2-1230-DLFS.....	99	F2-1636-DLFS.....	99
F2-1212-FL45.....	82	F2-1230-DLFS45.....	100	F2-1636-DLFS45.....	100
F2-1212-FL90.....	83	F2-1230-DLFS90.....	101	F2-1636-DLFS90.....	101
F2-1212-JFS.....	64	F2-1230-DLM.....	98	F2-1636-DLM.....	98
F2-1212-JFS45M.....	66	F2-1230-KFS.....	107	F2-1642-DHFS.....	103
F2-1212-JFS90L.....	69	F2-1230-KFS45.....	108	F2-1642-DHFS90.....	105
F2-1212-JFS90M.....	67	F2-1230-KFS90.....	109	F2-1642-DHM.....	102
F2-1212-JFS90M-S.....	68	F2-1233-KFS.....	107	F4-0808-BFS.....	147
F2-1212-JFS-S.....	65	F2-1236-DHFS.....	103	F4-0808-BSPFS90.....	149
F2-1212-JISS.....	106	F2-1236-DHFS45.....	104	F4-0808-FL.....	129
F2-1212-JM.....	63	F2-1236-DHFS90.....	105	F4-0808-FL45.....	132
F2-1212-JNR.....	89	F2-1236-DHM.....	102	F4-0808-FL90.....	135
F2-1212-MFL.....	88	F2-1612-JFS.....	64	F4-0808-FLH.....	137
F2-1212-OBM.....	78	F2-1612-PM.....	56	F4-0808-FLH90.....	139
F2-1212-OBMS.....	79	F2-1616-BFS.....	94	F4-0808-JFS.....	118
F2-1212-OBMS90.....	80	F2-1616-BPM.....	92	F4-0808-JFS45M.....	120
F2-1212-OFS.....	74	F2-1616-BSPFS45.....	95	F4-0808-JFS90M.....	121
F2-1212-OFS45M.....	75	F2-1616-BSPFS90.....	96	F4-0808-JM.....	117
F2-1212-OFS90L.....	77	F2-1616-BTM.....	93	F4-0808-OFS.....	124
F2-1212-OFS90M.....	76	F2-1616-FL.....	81	F4-0808-OFS45M.....	125
F2-1212-OM.....	73	F2-1616-FL45.....	82	F4-0808-OFS90M.....	126



INDEX

F4-0808-OM.....	123	F4-1212-FLH45.....	138	F4-1612-PM.....	114
F4-0808-PM.....	114	F4-1212-FLH45C.....	142	F4-1616-BFS.....	147
F4-0810-JFS.....	118	F4-1212-FLH90.....	139	F4-1616-BPM.....	145
F4-0810-JFS90M.....	121	F4-1212-FLH90C.....	143	F4-1616-BRF.....	144
F4-0810-JM.....	117	F4-1212-FLHC.....	141	F4-1616-BSPFS45.....	148
F4-0810-OFS.....	124	F4-1212-JFS.....	118	F4-1616-BSPFS90.....	149
F4-0810-OFS90M.....	126	F4-1212-JFS45M.....	120	F4-1616-BTM.....	146
F4-0812-FL.....	129	F4-1212-JFS90L.....	122	F4-1616-FL.....	129
F4-0812-FL45.....	132	F4-1212-JFS90M.....	121	F4-1616-FL22.5.....	130
F4-0812-FL90.....	135	F4-1212-JFS-S.....	119	F4-1616-FL30.....	131
F4-0812-JFS.....	118	F4-1212-JM.....	117	F4-1616-FL45.....	132
F4-0812-OFS.....	124	F4-1212-OBM.....	128	F4-1616-FL60.....	133
F4-0822-KFS.....	156	F4-1212-OFS.....	124	F4-1616-FL67.5.....	134
F4-0824-DHFS.....	153	F4-1212-OFS45M.....	125	F4-1616-FL90.....	135
F4-0824-DHFS45.....	154	F4-1212-OFS90L.....	127	F4-1616-FL90L120.....	136
F4-0824-DHFS90.....	155	F4-1212-OFS90M.....	126	F4-1616-FLH.....	137
F4-0824-DHM.....	152	F4-1212-OM.....	123	F4-1616-FLH45.....	138
F4-1010-JFS.....	118	F4-1212-PM.....	114	F4-1616-FLH45C.....	142
F4-1010-JFS45M.....	120	F4-1212-PM-S.....	115	F4-1616-FLH90.....	139
F4-1010-JFS90M.....	121	F4-1214-JFS.....	118	F4-1616-FLH90C.....	143
F4-1010-OFS.....	124	F4-1216-FL.....	129	F4-1616-FLH90L120.....	140
F4-1010-OFS45M.....	125	F4-1216-FL22.5.....	130	F4-1616-FLHC.....	141
F4-1010-OFS90M.....	126	F4-1216-FL45.....	132	F4-1616-JFS.....	118
F4-1012-JFS.....	118	F4-1216-FL67.5.....	134	F4-1616-JFS45M.....	120
F4-1012-JFS45M.....	120	F4-1216-FL90.....	135	F4-1616-JFS90L.....	122
F4-1012-JFS90M.....	121	F4-1216-FLH.....	137	F4-1616-JFS90M.....	121
F4-1012-OFS.....	124	F4-1216-FLH45.....	138	F4-1616-JFS-S.....	119
F4-1012-OFS45M.....	125	F4-1216FLH45C.....	142	F4-1616-JM.....	117
F4-1012-OFS90M.....	126	F4-1216-FLH90.....	139	F4-1616-OBM.....	128
F4-1024-KFS.....	156	F4-1216-FLH90C.....	143	F4-1616-OFS.....	124
F4-1030-DHFS.....	153	F4-1216-FLHC.....	141	F4-1616-OFS45M.....	125
F4-1036-DHFS.....	153	F4-1216-JFS.....	118	F4-1616-OFS90L.....	127
F4-1210-JFS.....	118	F4-1216-JFS45M.....	120	F4-1616-OFS90M.....	126
F4-1212-BFS.....	147	F4-1216-JFS90M.....	121	F4-1616-OM.....	123
F4-1212-BPM.....	145	F4-1216-JM.....	117	F4-1616-PM.....	114
F4-1212-BRF.....	144	F4-1216-OFS.....	124	F4-1616-PM-S.....	115
F4-1212-BSPFS45.....	148	F4-1216-OFS90M.....	126	F4-1620-FL.....	129
F4-1212-BSPFS90.....	149	F4-1224-KFS.....	156	F4-1620-FL22.5.....	130
F4-1212-BSPFS90-B.....	150	F4-1230-DHFS.....	153	F4-1620-FL45.....	132
F4-1212-BTM.....	146	F4-1230-DHFS45.....	154	F4-1620-FL60.....	133
F4-1212-FL.....	129	F4-1230-DHFS90.....	155	F4-1620-FL67.5.....	134
F4-1212-FL22.5.....	130	F4-1230-KFS.....	156	F4-1620-FL90.....	135
F4-1212-FL30.....	131	F4-1236-DHFS.....	153	F4-1620-FLH.....	137
F4-1212-FL45.....	132	F4-1236-DHFS45.....	154	F4-1620-FLH45.....	138
F4-1212-FL60.....	133	F4-1236-DHFS90.....	155	F4-1620-FLH45C.....	142
F4-1212-FL67.5.....	134	F4-1236-DHM.....	152	F4-1620-FLH90.....	139
F4-1212-FL90.....	135	F4-1612-FLH.....	137	F4-1620-FLH90C.....	143
F4-1212-FL90L95.....	136	F4-1612-JFS.....	118	F4-1620-FLHC.....	141
F4-1212-FLH.....	137	F4-1612-OFS.....	124	F4-1620-JFS.....	118



INDEX

F4-1620-OFS.....	124	F4-2424-BFS.....	147	F5-0606-JFS90M.....	112
F4-1633-KFS.....	156	F4-2424-BSPFS90.....	149	F5-0606-PM.....	110
F4-1636-DHFS.....	153	F4-2424-FL.....	129	F5-0606-SFS.....	113
F4-1636-DLFS.....	151	F4-2424-FL22.5.....	130	F5-0808-JFS.....	111
F4-1642-DHFS.....	153	F4-2424-FL45.....	132	F5-0808-JFS90M.....	112
F4-1642-DHFS45.....	154	F4-2424-FL67.5.....	134	F5-0808-PM.....	110
F4-1642-DHFS90.....	155	F4-2424-FL90.....	135	F5-1010-JFS.....	111
F4-1642-DHM.....	152	F4-2424-FLH.....	137	F5-1212-JFS.....	111
F4-2016-FL.....	129	F4-2424-FLH45.....	138	F5-1212-JFS90M.....	112
F4-2016-FLH.....	137	F4-2424-FLH90.....	139	F5-1212-PM.....	110
F4-2020-BFS.....	147	F4-2424-JFS.....	118	F5-1616-JFS.....	111
F4-2020-BPM.....	145	F4-2424-JFS45M.....	120	F5-1616-JFS90M.....	112
F4-2020-BSPFS90.....	149	F4-2424-JFS90M.....	121	F5-1616-PM.....	110
F4-2020-BTM.....	146	F4-2424-JFS-S.....	119	F5-2020-JFS.....	111
F4-2020-FL.....	129	F4-2424-JM.....	117	F5-2020-PM.....	110
F4-2020-FL45.....	132	F4-2424-OFS.....	124	F5-2424-JFS.....	111
F4-2020-FL60.....	133	F4-2424-OFS45M.....	125	F5-2424-PM.....	110
F4-2020-FL67.5.....	134	F4-2424-OFS90M.....	126	F5-3232-JFS.....	111
F4-2020-FL90.....	135	F4-2424-PM.....	114	F5-3232-PM.....	110
F4-2020-FLH.....	137	F4-2424-PM-S.....	115	F6-0606-PFS.....	177
F4-2020-FLH45.....	138	F4-2432-FL.....	129	F6-2016-FLH90.....	167
F4-2020-FLH45C.....	142	F4-2432-FL45.....	132	F6-2020-FLH.....	165
F4-2020-FLH90.....	139	F4-2432-FL90.....	135	F6-2020-FLH45.....	166
F4-2020-FLH90C.....	143	F4-2452-DLFS.....	151	F6-2020-FLH45C.....	169
F4-2020-FLHC.....	141	F4-3224-FL90.....	135	F6-2020-FLH90.....	167
F4-2020-JFS.....	118	F4-3232-BFS.....	147	F6-2020-FLH90C.....	170
F4-2020-JFS45M.....	120	F4-3232-FL.....	129	F6-2020-FLHC.....	168
F4-2020-JFS90L.....	122	F4-3232-FL22.5.....	130	F6-2020-JFS.....	159
F4-2020-JFS90M.....	121	F4-3232-FL45.....	132	F6-2020-JFS45M.....	160
F4-2020-JFS-S.....	119	F4-3232-FL90.....	135	F6-2020-JFS90M.....	161
F4-2020-JM.....	117	F4-3232-FLH.....	137	F6-2020-OFS.....	171
F4-2020-OFS.....	124	F4-3232-FLH45.....	138	F6-2020-OFS90M.....	172
F4-2020-OFS45M.....	125	F4-3232-FLH90.....	139	F6-2020-OFS90M.....	173
F4-2020-OFS90L.....	127	F4-3232-JFS.....	118	F6-2020-PM.....	157
F4-2020-OFS90M.....	126	F4-3232-JFS45M.....	120	F6-2024-FLH.....	165
F4-2020-OM.....	123	F4-3232-JFS90M.....	121	F6-2024-FLH45.....	166
F4-2020-PM.....	114	F4-3232-JFS-S.....	119	F6-2024-FLH90.....	167
F4-2020-PM-S.....	115	F4-3232-JM.....	117	F6-2024-FLHC.....	168
F4-2024-FL.....	129	F4-3232-PM.....	114	F6-2424-BFS.....	174
F4-2024-FL45.....	132	F4-3232-PM-S.....	115	F6-2424-BPM.....	175
F4-2024-FL90.....	135	F4-3232-PM-X.....	116	F6-2424-FL.....	162
F4-2024-FLH.....	137	F4-3240-FL45.....	132	F6-2424-FL45.....	163
F4-2024-FLH45.....	138	F4-3240-FL90.....	135	F6-2424-FL90.....	164
F4-2024-FLH90.....	139	F5-0404-JFS.....	111	F6-2424-FLH.....	165
F4-2024-JFS.....	118	F5-0404-JFS90M.....	112	F6-2424-FLH45.....	166
F4-2045-DLFS.....	151	F5-0404-PM.....	110	F6-2424-FLH45C.....	169
F4-2052-DHFS.....	153	F5-0504-PM.....	110	F6-2424-FLH90.....	167
F4-2052-DHFS45.....	154	F5-0505-JFS.....	111	F6-2424-FLH90C.....	170
F4-2052-DHFS90.....	155	F5-0606-JFS.....	111	F6-2424-FLHC.....	168



INDEX

F6-2424-JFS.....	159	FS-3232-FL45.....	190	HB4K-10.....	21
F6-2424-JFS45M.....	160	FS-3232-FL90.....	191	HB4K-12.....	21
F6-2424-JFS90M.....	161	FS-3232-JFS.....	188	HB5K-4.....	22
F6-2424-OFS.....	171	FS-3232-PM.....	187	HB5K-6.....	22
F6-2424-PM.....	157	FT-0202-PM.....	176	HB5K-8.....	22
F6-2432-FL.....	162	FT-0402-PM.....	176	HB5KXT-4.....	23
F6-2432-FL45.....	163	FT-0404-JFS.....	178	HB5KXT-6.....	23
F6-2432-FL90.....	164	FT-0404-JFS90M.....	179	HB5KXT-8.....	23
F6-2432-FLH45.....	166	FT-0404-PM.....	176	HB6K-4.....	24
F6-3232-BFS.....	174	FT-0406-JFS.....	178	HB6K-6.....	24
F6-3232-BPM.....	175	FT-0604-PM.....	176	HBHTR5-4.....	36
F6-3232-FL.....	162	FT-0606-BFS.....	181	HBHTR5-5.....	36
F6-3232-FL45.....	163	FT-0606-JFS.....	178	HBHTR5-6.....	36
F6-3232-FL90.....	164	FT-0606-JFS90M.....	179	HBHTR5-8.....	36
F6-3232-FLH.....	165	FT-0606-JISS.....	184	HBHTR5-10.....	36
F6-3232-FLH45.....	166	FT-0606-OFS.....	182	HBHTR5-12.....	36
F6-3232-FLH90.....	167	FT-0606-OM.....	185	HBHTR5-16.....	36
F6-3232-FLH90C.....	170	FT-0606-OMB F4-1212- OBM.....	183	HBHTR5-20.....	36
F6-3232-JFS.....	159	FT-0606-PM.....	176	HBHTR5-24.....	36
F6-3232-JFS45M.....	160	FT-0606-SFS.....	180	HBHTR5-32.....	36
F6-3232-JFS90M.....	161	FT-0608-JFS.....	178	HBJK-4.....	33
F6-3232-PM.....	157	FT-0608-OFS.....	182	HBJK-6.....	33
F6-3232-PM-X.....	158	FT-0806-PM.....	176	HBR1-4.....	30
FS-12-FER.....	186	FT-0808-BFS.....	181	HBR1-6.....	30
FS-16-FER.....	186	FT-0808-JFS.....	178	HBR1-8.....	30
FS-20-FER.....	186	FT-0808-JFS90M.....	179	HBR1-10.....	30
FS-24-FER.....	186	FT-0808-PFS.....	177	HBR1-12.....	30
FS-32-FER.....	186	FT-0808-PM.....	176	HBR1-16.....	30
FS-1212-FL.....	189	FT-0810-JFS.....	178	HBR1-20.....	30
FS-1212-FL45.....	190	FT-1008-PM.....	176	HBR1-24.....	30
FS-1212-FL90.....	191	FT-1010-JFS.....	178	HBR1-32.....	30
FS-1212-JFS.....	188	FT-1212-JFS.....	178	HBR2-4.....	31
FS-1212-PM.....	187	FT-1212-PM.....	176	HBR2-6.....	31
FS-1616-FL.....	189	FT-1616-JFS.....	178	HBR2-8.....	31
FS-1616-FL45.....	190	FT-1616-PM.....	176	HBR2-10.....	31
FS-1616-FL90.....	191	HB3K-4.....	19	HBR2-12.....	31
FS-1616-JFS.....	188	HB3K-6.....	19	HBR2-16.....	31
FS-1616-PM.....	187	HB3K-8.....	19	HBR2-20.....	31
FS-2020-FL.....	189	HB3K-10.....	19	HBR2-24.....	31
FS-2020-FL45.....	190	HB3K-12.....	19	HBR2-32.....	31
FS-2020-FL90.....	191	HB3K-16.....	19	HBR4-12.....	34
FS-2020-JFS.....	188	HB3KXT-4.....	20	HBR4-16.....	34
FS-2020-PM.....	187	HB3KXT-6.....	20	HBR4-20.....	34
FS-2424-FL.....	189	HB3KXT-8.....	20	HBR4-24.....	34
FS-2424-FL45.....	190	HB3KXT-12.....	20	HBR4-32.....	34
FS-2424-FL90.....	191	HB3KXT-16.....	20	HBR5-4.....	35
FS-2424-JFS.....	188	HB4K-6.....	21	HBR5-5.....	35
FS-2424-PM.....	187	HB4K-8.....	21	HBR5-6.....	35
FS-3232-FL.....	189			HBR5-8.....	35



INDEX

HBR5-10.....	35	PUSH-4-250.....	37	TDS200-27.....	196
HBR5-12.....	35	PUSH-6-250.....	37	TDS200-27.....	196
HBR5-16.....	35	PUSH-8-250.....	37	TDS200-31.....	196
HBR5-20.....	35	PUSH-10-250.....	37	TDS200-31.....	196
HBR5-24.....	35	PUSH-12-250.....	37	TDS200-34.....	196
HBR5-32.....	35	TC100DR.....	193	TDS200-34.....	196
HHT2-4.....	32	TC100DR.....	193	TDS200-38.....	196
HHT2-6.....	32	TC100FP.....	193	TDS200-38.....	196
HHT2-8.....	32	TC100HP.....	193	TDS200-48.....	196
HHT2-12.....	32	TC100-SH.....	193	TDS200-48.....	196
HHT2-16.....	32	TC100-SP.....	193	TDS200-57.....	196
HPNS-4.....	46	TC165.....	194	TDS200-57.....	196
HPNS-6.....	46	TC165DR.....	194	TDS200-60.....	196
HPNS-8.....	46	TC200.....	196	TDS200-60.....	196
HPNS-10.....	46	TC200DR.....	196	TDS200-70.....	196
HPNS-12.....	46	TC200DR.....	196	TDS200-70.....	196
HPNS-16.....	46	TC450.....	196	TDS200-74.....	196
HPNS-20.....	46	TC-QCT.....	196	TDS200-74.....	196
HPNS-24.....	46	TC-QCT.....	196	THCB10-125-40.....	197
HPNS-32.....	46	TDS100-16.....	193	THCB10-125-40D.....	197
HPPS-4.....	47	TDS100-16.....	193	TNCR7-4.....	41
HPPS-6.....	47	TDS100-16.....	194	TNCR7-6.....	41
HPPS-8.....	47	TDS100-19.....	193	TNCR7-8.....	41
HPPS-12.....	47	TDS100-19.....	193	TNCR8-4.....	45
HPPS-16.....	47	TDS100-19.....	194	TNCR8-6.....	45
HPPS-24.....	47	TDS100-23.....	193	TNCR8-8.....	45
HPPS-32.....	47	TDS100-23.....	193	TR7-2.....	39
HS3K-20.....	25	TDS100-23.....	194	TR7-3.....	39
HS3K-24.....	25	TDS100-27.....	193	TR7-4.....	39
HS3K-32.....	25	TDS100-27.....	193	TR7-6.....	39
HS4K-10.....	26	TDS100-27.....	194	TR7-8.....	39
HS4K-12.....	26	TDS100-31.....	193	TR7-12.....	39
HS4K-16.....	26	TDS100-31.....	193	TR8-4.....	43
HS4K-20.....	26	TDS100-31.....	194	TR8-6.....	43
HS4K-24.....	26	TDS100-34.....	193	TR8-8.....	43
HS4K-32.....	26	TDS100-34.....	193	TTNCR7-4.....	42
HS5K-08.....	27	TDS100-34.....	194	TTNCR7-6.....	42
HS5K-10.....	27	TDS100-38.....	193	TTNCR7-8.....	42
HS5K-12.....	27	TDS100-38.....	193	TTR7-4.....	40
HS5K-16.....	27	TDS100-38.....	194	TTR7-6.....	40
HS5K-20.....	27	TDS100-48L.....	194	TTR7-8.....	40
HS5K-24.....	27	TDS200-14.....	196	TTR8-4.....	44
HS5K-32.....	27	TDS200-14.....	196	TTR8-6.....	44
HS5KXT-12.....	28	TDS200-16.....	196	TTR8-8.....	44
HS5KXT-16.....	28	TDS200-16.....	196		
HS6K-12.....	29	TDS200-19.....	196		
HS6K-16.....	29	TDS200-19.....	196		
HS6K-20.....	29	TDS200-23.....	196		
HS6K-24.....	29	TDS200-23.....	196		



FREQUENTLY ORDERED PRODUCTS

[illegible]





LOCATIONS

Contact Information

Toll Free: 800.231.7116

Fax: 800.759.4673

Sales and Customer Service: sales@texcelrubber.com
texcelrubber.com

Corporate Headquarters

4444 Homestead Road

Houston, Texas 77028

Phone: 713.675.8590

ADDITIONAL WAREHOUSE LOCATIONS

Chicago

2725 Davey Road, Suite 400
Woodridge, Illinois 60517

Sacramento

8760 Younger Creek Drive
Sacramento, California 95828

Denver

2460 Airport Blvd., Suite 300
Aurora, Colorado 80011

Newark

211 Executive Drive, Suite 9
Newark, Delaware 19702

Birmingham

236 Distribution Drive
Homewood, Alabama 35209

OTHER TEXCEL PRODUCTS

Looking for other quality products from Texcel? Request a catalog by calling 800.231.7116 or visiting texcelrubber.com.





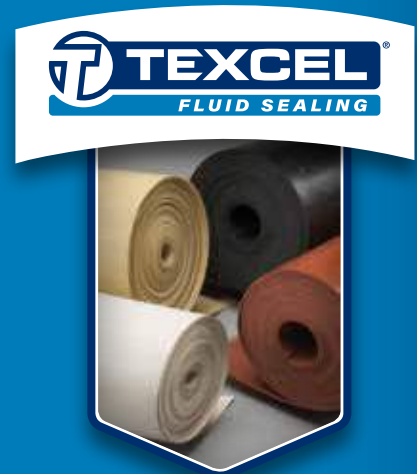
Ask Us About Our Other Great Products



HYDRAULIC HOSE
FITTINGS
CRIMPERS



INDUSTRIAL HOSE
COUPLINGS
ASSEMBLIES



COMPRESSED SHEET
SHEET RUBBER
SKIRTBOARD

Distributed by:

