

SAE STANDARD CONNECTIONS

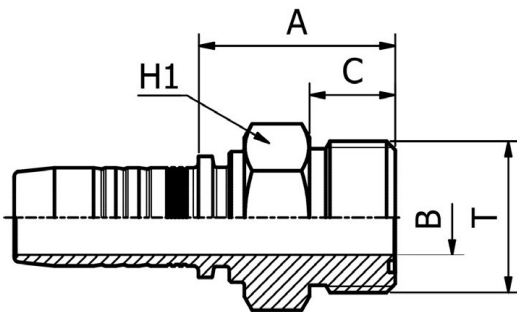
M22582F

90° JIC FEMALE COMPACT ELBOW
37° CONE SEAT

SAE J516 / ISO 12151-5 (THRUST-WIRE NUT)

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm					
	DN	Dash	inch			B	A	C	E	H1	H2
M22582-04-04F	6	- 4	1/4"	7/16" - 20	4.0	20.0	8.7	20.5	14.0	17.0	
M22582-04-06F	6	- 4	1/4"	9/16" - 18	7.0	20.0	9.2	21.5	14.0	19.0	
M22582-06-06F	10	- 6	3/8"	9/16" - 18	7.0	23.0	9.2	24.0	19.0	19.0	
M22582-06-08F	10	- 6	3/8"	3/4" - 16	9.3	26.5	10.2	28.0	22.0	22.0	
M22582-08-08F	12	- 8	1/2"	3/4" - 16	9.3	25.0	10.2	28.0	22.0	22.0	
M22582-08-10F	12	- 8	1/2"	7/8" - 14	12.5	25.0	12.3	29.0	22.0	27.0	
M22582-12-12F	19	- 12	3/4"	1.1/16" - 12	15.0	37.5	14.2	33.0	27.0	32.0	
M22582-16-16F	25	- 16	1"	1.5/16" - 12	20.0	52.0	15.0	40.0	36.0	38.0	

133 FITTINGS



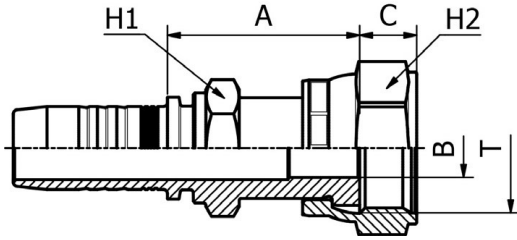
SAE STANDARD CONNECTIONS

M12410

ORFS MALE
SAE J516 / ISO 12151-1

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm				
	DN	Dash	inch			B	A	C	H1	
M12410-04-04	6	- 4	1/4"	9/16" - 18	4.0	24.0	9.8	16.0		
M12410-04-06	6	- 4	1/4"	11/16" - 16	6.7	26.5	11.2	19.0		
M12410-05-06	8	- 5	5/16"	11/16" - 16	6.7	27.0	11.2	19.0		
M12410-06-06	10	- 6	3/8"	11/16" - 16	6.7	27.5	11.2	19.0		
M12410-06-08	10	- 6	3/8"	13/16" - 16	9.3	30.0	12.8	22.0		
M12410-08-06	12	- 8	1/2"	11/16" - 16	6.7	29.0	11.2	22.0		
M12410-08-08	12	- 8	1/2"	13/16" - 16	9.3	30.5	12.8	22.0		
M12410-08-10	12	- 8	1/2"	1" - 14	12.5	35.0	15.5	27.0		
M12410-08-12	12	- 8	1/2"	1.3/16" - 12	15.0	37.5	17.0	32.0		
M12410-10-08	16	- 10	5/8"	13/16" - 16	9.3	30.5	12.8	22.0		
M12410-10-10	16	- 10	5/8"	1" - 14	12.5	34.5	15.5	27.0		
M12410-10-12	16	- 10	5/8"	1.3/16" - 12	15.0	37.5	17.0	32.0		
M12410-12-12	19	- 12	3/4"	1.3/16" - 12	15.0	39.0	17.0	32.0		
M12410-12-16	19	- 12	3/4"	1.7/16" - 12	19.8	40.5	17.5	38.0		
M12410-16-16	25	- 16	1"	1.7/16" - 12	19.8	42.0	17.5	38.0		
M12410-16-20	25	- 16	1"	1.11/16" - 12	26.0	44.0	17.5	46.0		
M12410-20-20	31	- 20	1.1/4"	1.11/16" - 12	26.0	46.5	17.5	46.0		
M12410-24-24	38	- 24	1.1/2"	2" - 12	32.0	48.5	17.5	55.0		

SAE STANDARD CONNECTIONS



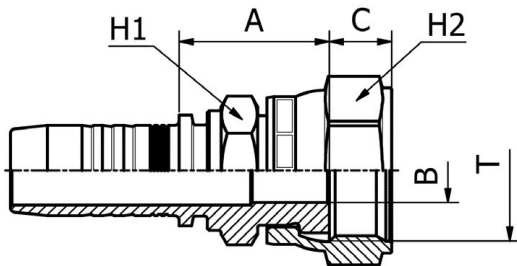
M22411

ORFS FEMALE
SAE J516 / ISO 12151-1 PULLBACK TYPE
(CRIMPED BACK-NUT)

FITTINGS 134

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm					
	DN	Dash	inch			B	A	C	H1	H2	
M22411-04-04	6	- 4	1/4"	9/16" - 18	4.0	27.5	8.0	13.0	19.0		
M22411-04-06	6	- 4	1/4"	11/16" - 16	7.0	30.0	9.5	16.0	22.0		
M22411-04-08	6	- 4	1/4"	13/16" - 16	9.3	35.5	11.0	19.0	24.0		
M22411-05-04	8	- 5	5/16"	9/16" - 18	4.0	28.5	8.0	16.0	19.0		
M22411-05-06	8	- 5	5/16"	11/16" - 16	7.0	30.5	9.5	16.0	22.0		
M22411-06-04	10	- 6	3/8"	9/16" - 18	4.0	29.0	8.0	16.0	19.0		
M22411-06-06	10	- 6	3/8"	11/16" - 16	7.0	31.0	9.5	16.0	22.0		
M22411-06-08	10	- 6	3/8"	13/16" - 16	9.3	36.5	11.0	19.0	24.0		
M22411-08-06	12	- 8	1/2"	11/16" - 16	7.0	32.0	9.5	19.0	22.0		
M22411-08-08	12	- 8	1/2"	13/16" - 16	9.3	37.0	11.0	19.0	24.0		
M22411-08-10	12	- 8	1/2"	1" - 14	11.5	39.0	13.5	24.0	30.0		
M22411-08-12	12	- 8	1/2"	1.3/16" - 12	13.9	44.0	14.5	28.0	36.0		
M22411-10-08	16	- 10	5/8"	13/16" - 16	9.3	37.0	11.0	24.0	24.0		
M22411-10-10	16	- 10	5/8"	1" - 14	11.5	39.0	13.5	24.0	30.0		
M22411-10-12	16	- 10	5/8"	1.3/16" - 12	13.9	44.0	14.5	28.0	36.0		
M22411-12-10	19	- 12	3/4"	1" - 14	11.5	41.5	13.5	28.0	30.0		
M22411-12-12	19	- 12	3/4"	1.3/16" - 12	13.9	45.5	14.5	28.0	36.0		
M22411-12-16	19	- 12	3/4"	1.7/16" - 12	19.8	48.5	15.0	36.0	41.0		
M22411-16-12	25	- 16	1"	1.3/16" - 12	13.9	48.0	13.5	36.0	36.0		
M22411-16-16	25	- 16	1"	1.7/16" - 12	19.8	49.5	15.0	36.0	41.0		
M22411-16-20	25	- 16	1"	1.11/16" - 12	26.0	52.0	13.6	41.0	50.0		
M22411-20-20	31	- 20	1.1/4"	1.11/16" - 12	26.0	52.0	14.8	41.0	50.0		
M22411-20-24	31	- 20	1.1/4"	2" - 12	32.0	56.5	14.2	50.0	60.0		
M22411-24-24	38	- 24	1.1/2"	2" - 12	32.0	56.5	14.2	50.0	60.0		

SAE STANDARD CONNECTIONS

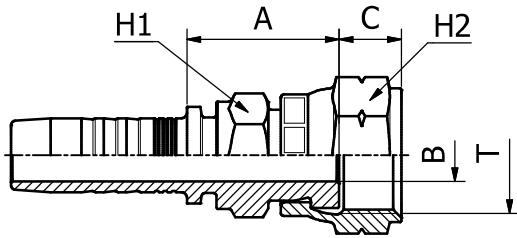


M27411

ORFS FEMALE
SAE J516 / ISO 12151-1 SHORT TYPE
(CRIMPED BACK-NUT)

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm					
	DN	Dash	inch			B	A	C	H1	H2	
M27411-04-04	6	- 4	1/4"	9/16" - 18	4.0	20.5	8.0	13.0	19.0		
M27411-04-06	6	- 4	1/4"	11/16" - 16	7.0	22.0	9.5	16.0	22.0		
M27411-05-06	8	- 5	5/16"	11/16" - 16	7.0	25.5	9.5	16.0	22.0		
M27411-06-06	10	- 6	3/8"	11/16" - 16	7.0	26.0	9.5	16.0	22.0		
M27411-06-08	10	- 6	3/8"	13/16" - 16	9.3	26.5	11.0	19.0	24.0		
M27411-08-08	12	- 8	1/2"	13/16" - 16	9.3	26.5	11.0	19.0	24.0		
M27411-08-10	12	- 8	1/2"	1" - 14	11.5	27.5	12.5	24.0	30.0		
M27411-08-12	12	- 8	1/2"	1.3/16" - 12	13.9	31.0	13.5	28.0	36.0		
M27411-10-10	16	- 10	5/8"	1" - 14	11.5	28.0	12.5	24.0	30.0		
M27411-10-12	16	- 10	5/8"	1.3/16" - 12	13.9	31.0	13.5	28.0	36.0		
M27411-12-12	19	- 12	3/4"	1.3/16" - 12	13.9	32.5	13.5	28.0	36.0		
M27411-16-16	25	- 16	1"	1.7/16" - 12	19.8	36.5	13.5	36.0	41.0		

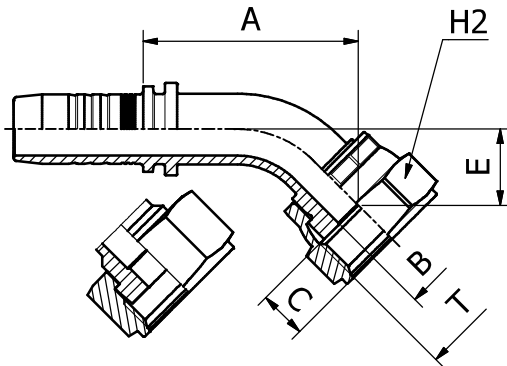
SAE STANDARD CONNECTIONS



M27411KR

**ORFS FEMALE
SAE J516 / ISO 12151-1 SHORT TYPE
(CRIMPED BACK-NUT)**

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm				
	DN	Dash	inch			B	A	C	H1	H2
M27411-04-04KR	6	- 4	1/4"	9/16" - 18	4.0	20.5	8.0	14.0	17.0	
M27411-06-06KR	10	- 6	3/8"	11/16" - 16	7.0	23.0	9.5	17.0	22.0	
M27411-08-08KR	12	- 8	1/2"	13/16" - 16	9.3	27.0	11.0	19.0	24.0	

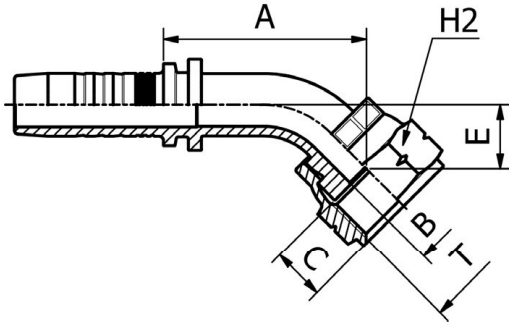


SAE STANDARD CONNECTIONS

M22441/M22443

**45° ORFS FEMALE SWEPT ELBOW
SAE J516 / ISO 12151-1**

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm				
	DN	Dash	inch			B	A	C	E	H2
M22441-08-06	12	- 8	1/2"	11/16" - 16	7.0	32.5	9.5	11.0	22.0	
M22441-12-10	19	- 12	3/4"	1" - 14	11.5	51.0	12.5	16.5	30.0	
M22441-16-12	25	- 16	1"	1.3/16" - 12	13.9	66.0	13.5	21.5	36.0	
M22443-04-04	6	- 4	1/4"	9/16" - 18	4.0	31.0	8.2	10.5	17.0	
M22443-04-06	6	- 4	1/4"	11/16" - 16	7.0	31.0	9.5	10.5	22.0	
M22443-05-06	8	- 5	5/16"	11/16" - 16	7.0	34.0	9.5	10.5	22.0	
M22443-06-06	10	- 6	3/8"	11/16" - 16	6.0	32.5	9.5	11.0	22.0	
M22443-06-08	10	- 6	3/8"	13/16" - 16	9.3	34.0	11.0	12.5	24.0	
M22443-08-08	12	- 8	1/2"	13/16" - 16	9.0	42.0	11.0	13.0	24.0	
M22443-08-10	12	- 8	1/2"	1" - 14	11.5	42.0	13.5	13.5	30.0	
M22443-08-12	12	- 8	1/2"	1.3/16" - 12	13.9	46.5	14.5	18.5	36.0	
M22443-10-10	16	- 10	5/8"	1" - 14	11.5	49.0	13.5	16.0	30.0	
M22443-10-12	16	- 10	5/8"	1.3/16" - 12	13.9	51.5	14.5	18.5	36.0	
M22443-12-12	19	- 12	3/4"	1.3/16" - 12	13.9	60.5	14.5	21.5	36.0	
M22443-12-16	19	- 12	3/4"	1.7/16" - 12	19.8	60.0	14.8	21.0	41.0	
M22443-16-16	25	- 16	1"	1.7/16" - 12	19.8	72.0	14.8	23.5	41.0	
M22443-16-20	25	- 16	1"	1.11/16" - 12	26.0	74.0	14.8	25.0	50.0	
M22443-20-20	31	- 20	1.1/4"	1.11/16" - 12	26.0	82.0	14.8	27.0	50.0	
M22443-24-24	38	- 24	1.1/2"	2" - 12	32.0	98.0	14.8	31.5	60.0	



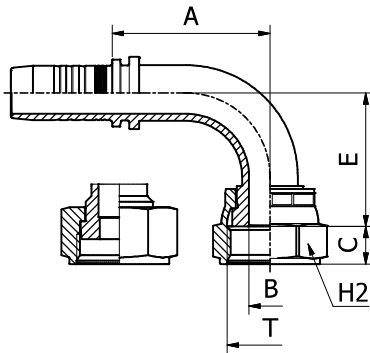
SAE STANDARD CONNECTIONS

M22441KR

45° ORFS FEMALE SWEPT ELBOW
SAE J516 / ISO 12151-1

FITTINGS 136

PART. REF.	HOSE BORE			Thread	DIMENSIONS mm						
	DN	Dash	inch		T	B	A	C	E	H2	
M22441-04-04KR	6	- 4	1/4"	9/16" - 18	4.2	30.0	8.0	10.5	17.0		
M22441-06-06KR	10	- 6	3/8"	11/16" - 16	6.0	31.5	9.5	11.0	22.0		
M22441-08-08KR	12	- 8	1/2"	13/16" - 16	9.0	42.5	11.0	13.5	24.0		

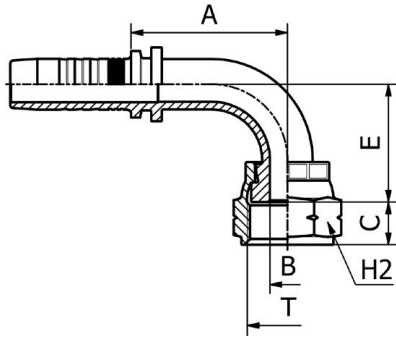


SAE STANDARD CONNECTIONS

M22491/M22493

90° ORFS FEMALE SWEPT ELBOW
SAE J516 / ISO 12151-1

PART. REF.	HOSE BORE			Thread	DIMENSIONS mm						
	DN	Dash	inch		T	B	A	C	E	H2	
M22491-10-10032	16	- 10	5/8"	1" - 14	11.0	42.0	7.5	32.0	30.0		
M22491-06-04	10	- 6	3/8"	9/16" - 18	4.0	28.0	8.0	23.0	19.0		
M22491-08-06	12	- 8	1/2"	11/16" - 16	7.0	30.0	9.5	24.5	22.0		
M22491-10-08	16	- 10	5/8"	13/16" - 16	9.3	41.0	11.0	34.0	24.0		
M22491-12-10	19	- 12	3/4"	1" - 14	11.5	49.0	12.5	38.5	30.0		
M22491-16-12	25	- 16	1"	1.3/16" - 12	13.9	57.5	13.5	48.0	36.0		
M22493-04-04	6	- 4	1/4"	9/16" - 18	4.0	27.5	8.2	22.0	17.0		
M22493-04-06	6	- 4	1/4"	11/16" - 16	7.0	27.5	9.5	22.0	22.0		
M22493-05-06	8	- 5	5/16"	11/16" - 16	7.0	32.0	9.5	23.0	22.0		
M22493-06-06	10	- 6	3/8"	11/16" - 16	6.0	30.0	9.5	24.0	22.0		
M22493-06-08	10	- 6	3/8"	13/16" - 16	9.3	30.0	11.0	26.5	24.0		
M22493-08-08	12	- 8	1/2"	13/16" - 16	9.0	40.5	11.0	30.0	24.0		
M22493-08-10	12	- 8	1/2"	1" - 14	11.5	40.0	13.5	30.5	30.0		
M22493-08-12	12	- 8	1/2"	1.3/16" - 12	13.9	39.5	14.5	37.5	36.0		
M22493-10-10	16	- 10	5/8"	1" - 14	11.5	48.0	13.5	37.5	30.0		
M22493-10-12	16	- 10	5/8"	1.3/16" - 12	13.9	48.0	14.5	41.0	36.0		
M22493-12-12	19	- 12	3/4"	1.3/16" - 12	13.9	56.5	14.5	48.0	36.0		
M22493-12-16	19	- 12	3/4"	1.7/16" - 12	19.8	56.5	14.8	47.5	41.0		
M22493-16-16	25	- 16	1"	1.7/16" - 12	19.8	71.5	14.8	56.0	41.0		
M22493-16-20	25	- 16	1"	1.11/16" - 12	26.0	71.5	14.8	58.5	50.0		
M22493-20-20	31	- 20	1.1/4"	1.11/16" - 12	26.0	83.0	14.8	66.0	50.0		
M22493-24-24	38	- 24	1.1/2"	2" - 12	32.0	102.0	14.8	79.5	60.0		

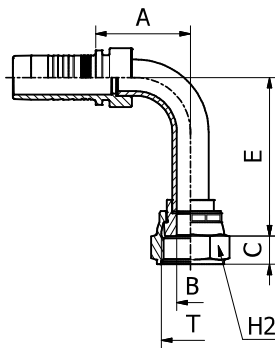


SAE STANDARD CONNECTIONS

M22491KR

90° ORFS FEMALE SWEPT ELBOW
SAE J516 / ISO 12151-1

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm				
	DN	Dash	inch			B	A	C	E	H2
M22491-04-04KR	6	- 4	1/4"	9/16" - 18	4.2	26.5	8.0	22.0	17.0	
M22491-04-06KR	6	- 4	1/4"	11/16" - 16	6.0	26.3	9.5	22.0	22.0	
M22491-06-06KR	10	- 6	3/8"	11/16" - 16	6.0	29.0	9.5	24.0	22.0	
M22491-06-08KR	10	- 6	3/8"	13/16" - 16	9.0	35.5	11.0	28.5	24.0	
M22491-08-08KR	12	- 8	1/2"	13/16" - 16	9.0	40.5	11.0	30.5	24.0	



SAE STANDARD CONNECTIONS

M24491 LONG DROP

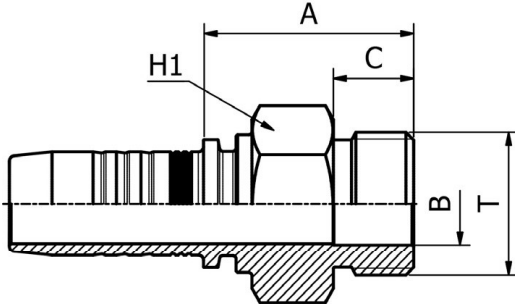
90° ORFS FEMALE LONG DROP ELBOW
SAE J516 / ISO 12151-1
(CRIMPED-BACK NUT)

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm				
	DN	Dash	inch			B	A	C	E	H2
M24491-04-04	6	- 4	1/4"	9/16" - 18	4.4	25.0	8.0	46.0	17.0	
M24491-04-06	6	- 4	1/4"	11/16" - 16	7.0	26.5	9.5	53.5	22.0	
M24491-05-06	8	- 5	5/16"	11/16" - 16	6.7	31.5	9.5	54.0	22.0	
M24491-06-06	10	- 6	3/8"	11/16" - 16	6.7	32.0	9.5	54.0	22.0	
M24491-06-08	10	- 6	3/8"	13/16" - 16	6.7	32.0	11.0	54.0	24.0	
M24491-08-08	12	- 8	1/2"	13/16" - 16	9.6	37.0	11.0	64.0	24.0	
M24491-08-10	12	- 8	1/2"	1" - 14	9.6	37.0	12.5	64.5	30.0	
M24491-10-10	16	- 10	5/8"	1" - 14	12.0	41.0	13.0	70.0	30.0	
M24491-10-12	16	- 10	5/8"	1.3/16" - 12	12.7	41.0	13.5	73.0	36.0	
M24491-12-12	19	- 12	3/4"	1.3/16" - 12	15.0	58.5	13.5	96.0	36.0	
M24491-16-16	25	- 16	1"	1.7/16" - 12	19.8	71.5	13.5	114.0	41.0	
M24491-20-20	31	- 20	1.1/4"	1.11/16" - 12	26.0	82.5	13.6	129.0	50.0	

SAE STANDARD CONNECTIONS

M13010

SAE MALE O-RING BOSS TYPE
SAE J516 / ISO 11926



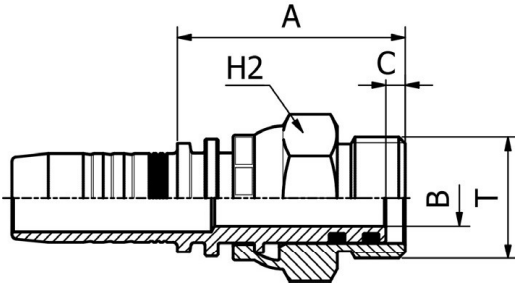
FITTINGS 138

PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm			
	DN	Dash	inch			B	A	C	H1
M13010-04-04	6	- 4	1/4"	7/16" - 20	4.4	24.0	9.1	14.0	
M13010-04-06	6	- 4	1/4"	9/16" - 18	7.5	24.5	9.9	17.0	
M13010-06-06	10	- 6	3/8"	9/16" - 18	7.5	25.5	9.9	17.0	
M13010-06-08	10	- 6	3/8"	3/4" - 16	9.9	28.5	11.1	22.0	
M13010-06-10	10	- 6	3/8"	7/8" - 14	12.3	31.5	12.7	25.0	
M13010-08-08	12	- 8	1/2"	3/4" - 16	9.9	29.0	11.1	22.0	
M13010-08-10	12	- 8	1/2"	7/8" - 14	12.3	32.0	12.7	25.0	
M13010-08-12	12	- 8	1/2"	1.1/16" - 12	15.5	38.5	15.1	32.0	
M13010-10-10	16	- 10	5/8"	7/8" - 14	12.5	32.0	12.7	25.0	
M13010-10-12	16	- 10	5/8"	1.1/16" - 12	15.5	37.5	15.1	32.0	
M13010-12-12	19	- 12	3/4"	1.1/16" - 12	15.5	39.5	15.1	32.0	
M13010-12-16	19	- 12	3/4"	1.5/16" - 12	21.5	40.0	15.1	38.0	
M13010-16-16	25	- 16	1"	1.5/16" - 12	21.5	41.0	15.1	38.0	
M13010-20-20	31	- 20	1.1/4"	1.5/8" - 12	27.5	43.5	15.1	46.0	

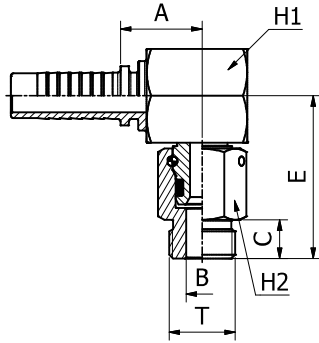
SAE STANDARD CONNECTIONS

M14310

SAE SWIVEL MALE O-RING BOSS TYPE
SAE J516 / ISO 11926



PART. REF.	HOSE BORE			Thread	T	DIMENSIONS mm			
	DN	Dash	inch			B	A	C	H2
M14310-04-04	6	- 4	1/4"	7/16" - 20	4.0	43.0	9.1	17.0	
M14310-04-06	6	- 4	1/4"	9/16" - 18	7.0	44.0	9.9	22.0	
M14310-06-06	10	- 6	3/8"	9/16" - 18	7.0	48.0	9.9	22.0	
M14310-06-08	10	- 6	3/8"	3/4" - 16	9.3	47.0	11.1	22.0	
M14310-08-08	12	- 8	1/2"	3/4" - 16	9.3	53.0	11.1	27.0	
M14310-08-10	12	- 8	1/2"	7/8" - 14	9.3	41.5	13.0	27.0	
M14310-08-12	12	- 8	1/2"	1.1/16" - 12	12.5	49.5	15.0	32.0	
M14310-10-10	16	- 10	5/8"	7/8" - 14	9.3	41.5	13.0	27.0	
M14310-12-12	19	- 12	3/4"	1.1/16" - 12	12.5	50.5	15.0	32.0	



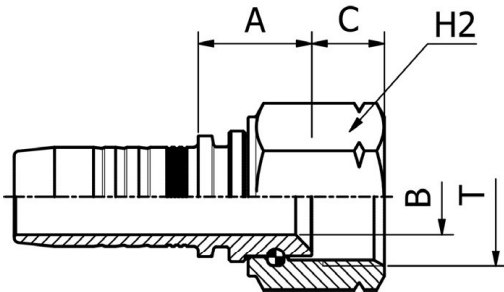
SAE STANDARD CONNECTIONS

M14390

90° SAE SWIVEL MALE O-RING BOSS TYPE
SAE J516 / ISO 11926

PART. REF.	HOSE BORE			Thread		DIMENSIONS mm					
	DN	Dash	inch			T	B	A	C	E	H1
M14390-06-06	10	- 6	3/8"	9/16" - 18		5.7	20.0	9.9	40.0	22.0	17.0
M14390-06-08	10	- 6	3/8"	3/4" - 16		9.3	20.0	11.1	44.5	22.0	22.0
M14390-08-08	12	- 8	1/2"	3/4" - 16		9.3	23.5	11.1	47.0	27.0	22.0
M14390-08-10	12	- 8	1/2"	7/8" - 14		9.8	23.5	13.0	47.0	27.0	27.0
M14390-10-10	16	- 10	5/8"	7/8" - 14		9.8	23.5	13.0	47.0	27.0	27.0
M14390-12-12	19	- 12	3/4"	1.1/16" - 12		13.0	28.0	15.0	58.5	34.0	32.0

139 FITTINGS



SAE STANDARD CONNECTIONS

M22612

SAE FEMALE 45° CONE SEAT
SAE J516/J512
(THRUST-WIRE NUT)

PART. REF.	HOSE BORE			Thread		DIMENSIONS mm			
	DN	Dash	inch			T	B	A	C
M22612-04-04	6	- 4	1/4"	7/16" - 20		4.0	15.5	8.7	17.0
M22612-05-06	8	- 5	5/16"	5/8" - 18		7.0	16.0	10.8	22.0
M22612-06-06	10	- 6	3/8"	5/8" - 18		7.0	16.5	10.8	22.0
M22612-12-12	19	- 12	3/4"	1.1/16" - 14		15.0	22.5	14.4	32.0