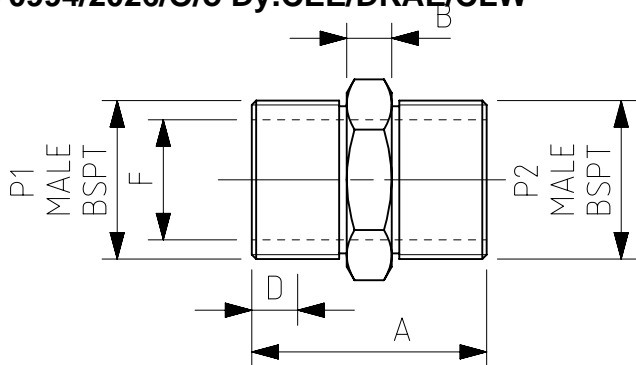
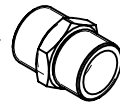


5070994/2026/O/o Dy.CEE/DKAE/CLW



NOTE:-







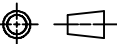
1. REMOVE ALL BURRS & SHARP EDGES.
2. TO BE Zn PLATED (10 MICRON)/ PASSIVATED.
3. ALL DIMENSIONS ARE IN mm EXCEPT OTHERWISE STATED. DIMENSIONS ARE INDICATIVE.
4. SL. No. 1 TO 8 ARE APPLICABLE FOR WAG-9 & SL. No. 1 TO 12 ARE APPLICABLE FOR WAP-5 LOCO ONLY.



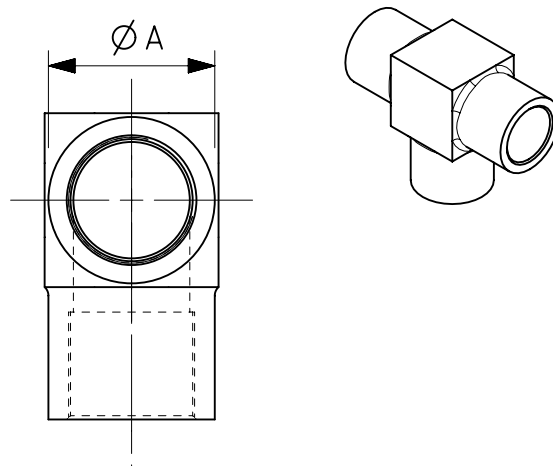
SL. No.	P1	P2	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	DUFFIELD CATALOGUE PART No.	OR SIMILAR
1	1-1/4"	1-1/4"	61.11	11.9	44.45	12.7	31.75	D04/2020	OR SIMILAR
2	3/4"	3/4"	47.62	8.73	28.57	9.52	18.25	D04/1212	"
3	1/2"	3/8"	41.27	7.93	22.22	8.15	10.31	D04/86	"
4	1/2"	1/2"	46.03	7.93	22.22	8.15	13.49	D04/88	"
5	1"	3/4"	52.38	9.52	34.92	10.38	18.25	D04/1612	"
6	3/8"	3/8"	34.92	6.35	19.05	6.35	10.31	D04/66	"
7	1/4"	1/8"	30.16	6.35	15.875	5.99	7.46	D04/42	"
8	3/8"	1/4"	34.92	6.35	19.05	6.35	7.14	D04/64	"
9	3/4"	1/2"	47.62	8.73	28.57	9.82	13.47	D04/128	"
10	1-1/4"	1"						D04/2016	"
11	1/4"	1/4"	34.92	6.35	19.05	5.99	7.14	D04/44	"
12	1"	1"	57.15	9.52	34.92	10.38	23.81	D04/1616	"

1. ALL DIMENSIONS ARE IN mm
2. C&D NO.
3. QTY./LOCO: 1
4. NEXT LEVEL ASSEMBLY DRG. NO.
5. USED FOR LOCO- WAG9, WAP5

REF. NO.	PART DRG. NO.	DESCRIPTION	QTY.	MATL	SPECN	WT. EACH IN K.G.
8		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
7		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
6		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
5		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
4		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
3		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
2		NIPPLE BSPTxBSPT	-	STEEL	ASTM A108	-
1		NIPPLE BSPTxBSPT	10	STEEL	ASTM A108	-
निर्देश संख्या	अंग आरेखण संख्या	वर्णन	मात्रा	पदार्थ	विशिष्ट	प्रति भार कि. ग्रा.
REF. NO.	PART DRG. NO.	DESCRIPTION	QTY.	MATL	SPECN	WT. EACH IN K.G.

4		REDRAWN IN NX WITH 3RD ANGLE PROJECTION.	06-10-09	अधिकल्पित DGN	 <div>चितरंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS, INDIA</div>										
3	AME/D&D	NOTE 4 ADDED.	19-04-99	जॉचा व.अ.अ. CHD SSE		पदार्थ STEEL	प्रति भार कि. ग्रा. WT. EACH IN KG								
2	AME/D&D	SL. NO. WAS REF. NO. NOTE 3 & WAP-5 ADDED. NO./LOCO COLUMN DELETED.	12-04-99	MANOJ KUMAR SAGAR <small>Digitally signed by MANOJ KUMAR SAGAR Date: 2023.07.13 17:00:21 +05'30'</small>											
1	AME/D&D	QTY. OF REF. NO. 4 WAS 14	14-08-98												
परिवर्तन संख्या ALT.NO.	प्राधिकार AUTHY	वर्णन DESCRIPTION	दिनांक आशय DATED INITIAL	समीक्षित स.वि.अ. / व.वि.अ. REVIEWED AEE / SEE	Pradeep Khatana <small>Digitally signed by Pradeep Khatana Date: 2023.07.13 16:06:51 +05'30'</small>	विशिष्ट SPECN	ASTM A108								
सतह — रूखाता का मान वा. मा. 3073 / अ. मा. सं. 1302 <small>SURFACE ROUGHNESS VALUE TO IS:3073 / ISO:1302</small>		अनिर्दिष्ट सद्य — सीमा वा. मा. : 2102 / अ. मा. सं. : 2768 <small>UNSPECIFIED TOLERANCE TO IS : 2102 / ISO : 2768</small>		TOL. CLS.	अनुमोदित उ.मु.वि.अ. APPROVED DYCEE	SYAMA PRASAD PATRA <small>Digitally signed by SYAMA PRASAD PATRA Date: 2023.07.13 16:06:51 +05'30'</small>	वर्णन	NIPPLE (BSPT x BSPT)							
		धातु-रेल्वन चिन्ह वा. मा. : 813 / अ. मा. सं. : 2553 <small>WELDING SYMBOLS TO IS:813 / ISO:2553</small>			दिनांक DATE	05-10-20	DESCRIPTION								
पदांक GRADE NO.	सं1 N1	सं2 N2	सं3 N3	सं4 N4	सं5 N5	सं6 N6	सं7 N7	सं8 N8	सं9 N9	सं10 N10	सं11 N11	सं12 N12			
Rz	0.16-0.3	0.5-0.7	0.9-1.1	1.5-2.0	2.5-3.8	5.0-6.3	9.0-12	16-25	30-40	50-63	75-100	160-250			
Ra μm	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50			
चिन्ह SYMBOL															
संदर्भ / REF.				182-00424		ALT. -				परिवर्तन संख्या ALTERATION. NO.		4	पृष्ठ SHEET	1 OF 1	A4


Technical drawing of a T-joint showing dimensions and a 2x45° CHAMFER. The drawing includes dimensions B, L, p', and a chamfer specification.



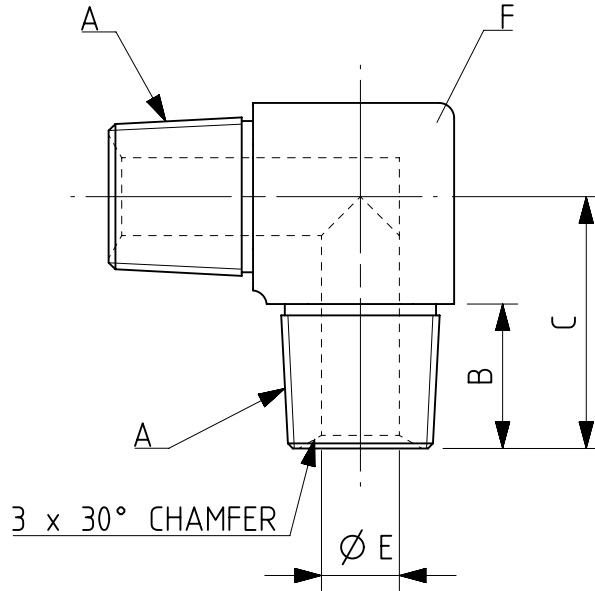
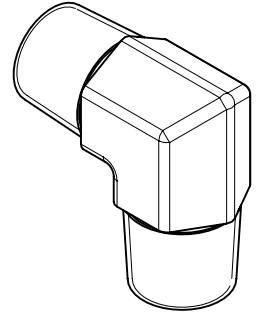
SL. NO.	'P' FEMALE PARALLEL THD. TO ISO 228/1	Ø A (MIN)	B (MIN)	L (MIN)
1	3/8"	22 ^{+0.5} ₋₀	29 ^{+0.5} ₋₀	14.2 ^{+0.5} ₋₀
2	1-1/4"	55 ^{+1.0} ₋₀	60 ^{+1.0} ₋₀	25.4 ^{+0.5} ₋₀
3	3/4"	32.5 ^{+0.5} ₋₀	35 ^{+1.0} ₋₀	19.1 ^{+0.5} ₋₀
4	1-1/2"	60 ^{+1.0} ₋₀	75 ^{+1.0} ₋₀	26.2 ^{+0.5} ₋₀
5	1/2"	27 ^{+2.0} ₋₀	32 ^{+2.0} ₋₀	19.1 ^{+2.0} ₋₀

NOTE:

1. REMOVE ALL BURRS AND SHARP EDGES.
2. TO BE ZINC PLATED (10 μ)/PASSIVATED.
3. ALL DIMENSIONS ARE IN MM EXCEPT OTHERWISE STATED.
4. ~~SL. NO.1 IS APPLICABLE FOR WAG/9 & SL. NO. 1 & 2 ARE APPLICABLE FOR WAP/5 LOCO ONLY.~~
5. TEES SHALL BE MACHINED FROM FORGED BLANKS AND NOT TO BE CAST.
6. ISO 7/1 & ISO 228/1 FOR TAPER AND PARALLEL THREADS RESPECTIVELY.

<div><div><div>4</div></div></div>													5	/		TEE 1/2"X1/2"X1/2"		STEEL	ASTM A108	
													4	/		TEE 1 1/2"X1 1/2"X1 1/2"		STEEL	ASTM A108	
													3	/		TEE 3/4"X3/4"X3/4"		STEEL	ASTM A108	
													2	/		TEE 1 1/4"X1 1/4"X1 1/4"		STEEL	ASTM A108	
													1	/		TEE 3/8"X3/8"X3/8"		STEEL	ASTM A108	
7		REDRAWN IN NX WITH 3RD ANGLE PROJECTION.										10-11-20								
6	DY.CEE/D-I	ITEM 5 DETAIL DIMENSIONS ADDED.										03-02								
5	DY.CEE/D-I	SL. NO. 5 ADDED										27-01-09								
4	AME/D&D	PREVIOUS VIEW, TABLE, NOTE 4, DRG. DESCRIPTION DELETED. NEW DRG. VIEWS, NOTES 5, 6 & DRG. DESCRIPTION, REF. NOS 3 & 4 ADDED.										30-07-01								
3	AME/D&D	NOTE 4 ADDED.										19-04-99								
2	AME/D&D	SL. NO. 2, WAP5, NOTE 3 ADDED. NO./LOCO COL. DELETED.										12-04-99								
1	AME/D&D	BSPT WAS BSP										19-05-99								
परिवर्तन संख्या ALT.NO.		प्राधिकार AUTHY		वर्णन DESCRIPTION						दिनांक आदेश DATED INITIAL										
सतह - रुखाता का मान वा. मा. 3073 / अ. मा. सं. 1302 SURFACE ROUGHNESS VALUE TO IS:3073 / ISO:1302		अनिर्दिष्ट सघ - सीमा वा. मा. : 2102 / अ. मा. सं. : 2768 UNSPECIFIED TOLERANCE TO IS : 2102 / ISO : 2768						TOL. CLS.												
		धातु-वेल्डन चिह्न वा. मा. : 813 / अ. मा. सं. : 2553 WELDING SYMBOLS TO IS:813 / ISO:2553																		
पदांक GRADE NO.	सं1 N1	सं2 N2	सं3 N3	सं4 N4	सं5 N5	सं6 N6	सं7 N7	सं8 N8	सं9 N9	सं10 N10	सं11 N11	सं12 N12								
Rz	0.16-0.3	0.5-0.7	0.9-1.1	1.5-2.0	2.5-3.8	5.0-6.3	9.0-12	16-25	30-40	50-63	75-100	160-250								
Ra μm	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50								
चिह्न SYMBOL																				
निर्देश संख्या		लागत एवं वितरण संख्या		अंग आरेखन संख्या		वर्णन		मात्रा		पदार्थ		विशिष्टि	प्रति भार कि. ग्रा.							
REF. NO.		C&D NO.		PART DRG. NO.		DESCRIPTION		QTY.		MATL		SPECN	WT. EACH IN K.G.							
अधिकल्पित DGN				जॉचा व.अ.अ. CHD SSE								चितरंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS, INDIA								
समीक्षित स.वि.अ. / व.वि.अ. REVIEWED AEE / SEE				Pradeep Khatana Digitally signed by Pradeep Khatana DN: cn=Pradeep Khatana, o=Chittaranjan Locomotive Works, ou=Chittaranjan Locomotive Works, email=pradeep.khatana@clw.co.in, c=IN				पदार्थ MATL		STEEL		प्रति भार कि. ग्रा. WT. EACH IN KG								
अनुमोदित उ.मु.वि.अ. APPROVED DYCEE				SYAMA PRASAD PATRA Digitally signed by SYAMA PRASAD PATRA DN: cn=SYAMA PRASAD PATRA, o=Chittaranjan Locomotive Works, ou=Chittaranjan Locomotive Works, email=syama.prasad.patra@clw.co.in, c=IN				विशिष्टि SPECN		ASTM A108										
दिनांक DATE				10-11-20				वर्णन DESCRIPTION		THREADED TEE (FEMALE) PARALLEL										
रेखिक अनुपात SCALE				1:1				आरेखन संख्या DRAWING NO.		1209-18.406-080										
संदर्भ / REF.				182-00445 ALT.-0						परिवर्तन संख्या ALTERATION. NO.		7		पर्ण SHEET	1 OF 1	A4				

5070994/2026/O/o Dy.CEE/DKAE/CLW










NOTE:

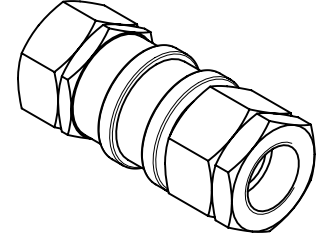
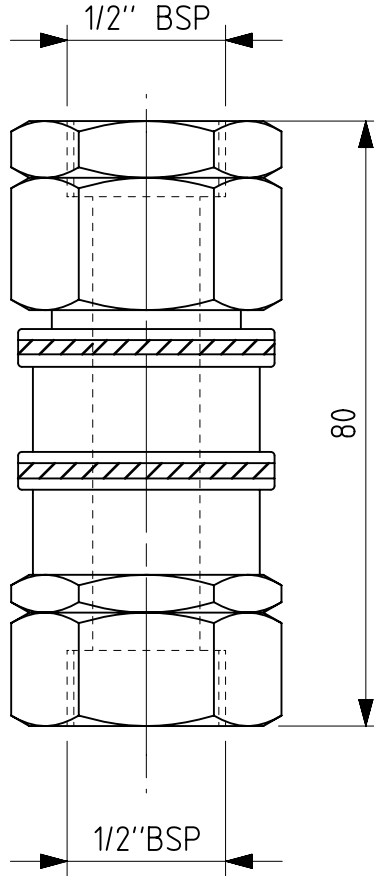
1. REMOVE ALL BURRS AND SHARP EDGES.
2. TO BE ZINC PLATED (10μ) / PASSIVATED.
3. ALL DIMENSIONS ARE IN mm EXCEPT OTHERWISE STATED.

SL.NO.	'A' THREAD SIZE BSPT	B	C	Ø E	A/F
1	1/2"	19.1 ⁺⁵ ₋₀	33.3 ⁺¹ ₋₀	10.3 ⁺⁵ ₋₀	22 ⁺⁵ ₋₀

NO/LOCO: 2
USED FOR LOCO: WAG-9

1												REDRAWN IN NX WITH 3RD ANGLE PROJECTION.		25-04-11		अभिलेखित DGN		जोधा व.अ. CHD SSE		ALOKE KUMAR CHAKRA BORTY <small>Digitally signed by ALOKE KUMAR CHAKRA BORTY Date: 2022.02.02 14:23:19 +05'30'</small>		 चित्तरंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS, INDIA	
परिवर्तन संख्या ALT.NO.		प्राधिकार AUTHY		वर्णन DESCRIPTION				दिनांकित बाह्य DATED INITIAL		समीक्षित स.वि.अ. / व.वि.अ. REVIEWED AEE / SEE		अनुमोदित स.यु.वि.अ. APPROVED DYCEE		Pradeep Khatana <small>Digitally signed by Pradeep Khatana Date: 2022.02.04 11:40:00 +05'30'</small>		पदार्थ MATL		STEEL		प्रति भार कि. ग्रा. WT. EACH IN KG			
सतह - रूखाता का मान मा. 3073 / अ. मा. सं. 1302		अनिर्दिष्ट सद्य - सीमा मा. : 2102 / अ. मा. सं. : 2768				TOL. CLS.		अनुमोदित स.यु.वि.अ.		SYAMA PRASAD PATRA		SYAMA PRASAD PATRA <small>Digitally signed by SYAMA PRASAD PATRA Date: 2022.02.03 12:26:09 +05'30'</small>		विशिष्ट SPECN		ASTM A 108		वर्णन DESCRIPTION		ELBOW MALE			
SURFACE ROUGHNESS VALUE TO IS:3073 / ISO:1302		धातु-वेल्डन चिन्ह मा. : 813 / अ. मा. सं. : 2553				WELDING SYMBOLS TO IS:813 / ISO:2553		दिनांक DATE		19-02-21		रैखिक अनुपात SCALE		1:1		आरेखण संख्या DRAWING NO.		1209-18.406-083					
पदांक GRADE NO.		सं1 N1	सं2 N2	सं3 N3	सं4 N4	सं5 N5	सं6 N6	सं7 N7	सं8 N8	सं9 N9	सं10 N10	सं11 N11	सं12 N12	संदर्भ / REF.		182-00518		ALT.- 0					
Rz		0.16-0.3	0.5-0.7	0.9-1.1	1.5-2.0	2.5-3.8	5.0-6.3	9.0-12	16-25	30-40	50-63	75-100	160-250										
Ra μ m		0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50										
चिन्ह SYMBOL																							
																		परिवर्तन संख्या ALTERATION. NO.		1			
																		पृष्ठ SHEET		1 OF 1			
																				A4			

5070994/2026/O/o Dy.CEE/DKAE/CLW



ORIGINAL SUPPLIER- NORDEN

PART NO. VHC 8-8 RP OR SIMILAR
VHN 8-8 RP OR SIMILAR







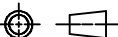
NOTES:

1. REMOVE ALL BURRS & SHARP EDGES.
2. TO BE ZINC PLATED (10 MICRONS).

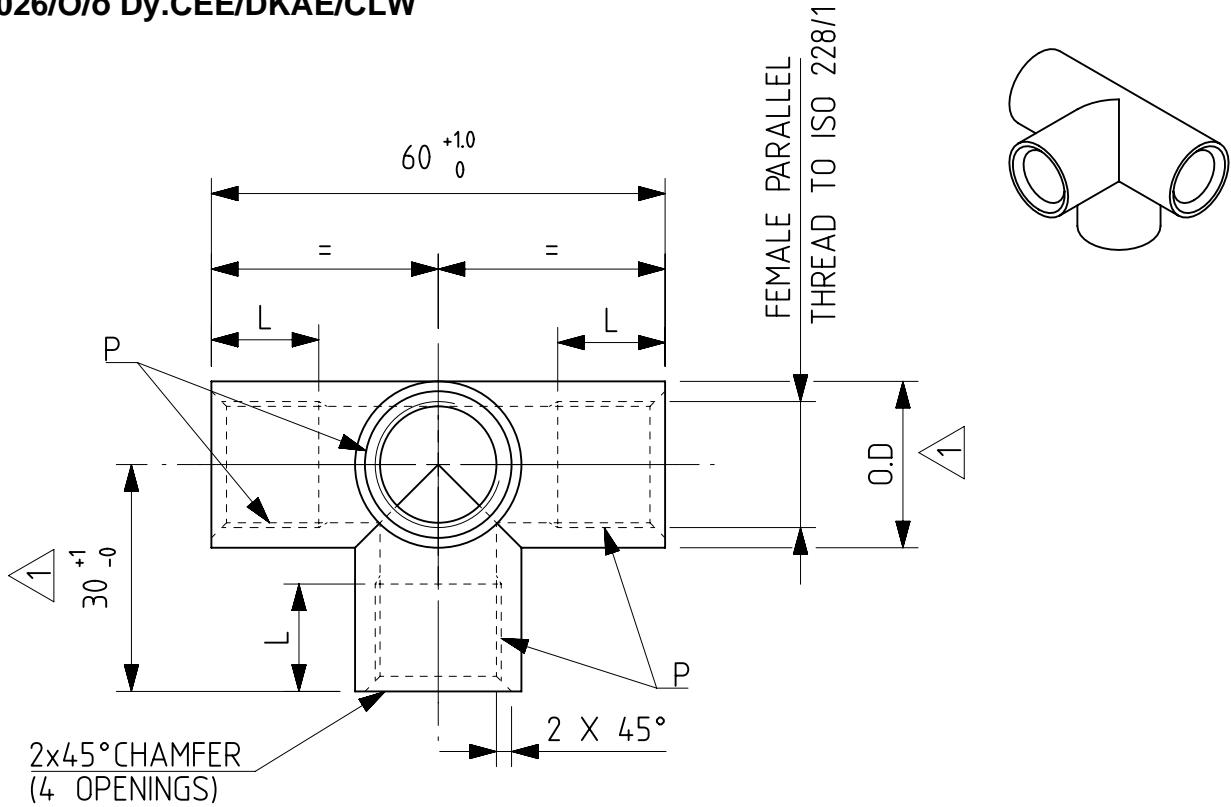
USED FOR LOCO.

WAP5, WAG7,
WAG9, WAP4

1			COUPLING QUICK (DISCONNECT)		STEEL	ASTM A-108	
निर्देश संख्या	लागत एवं वितरण संख्या	अंग आरेखण संख्या	वर्णन	मात्रा	पदार्थ	विशिष्टि	प्रति भार कि. ग्रा.
REF. NO.	C&D NO.	PART DRG. NO.	DESCRIPTION	QTY.	MATL	SPECN	WT. EACH IN K.G.

													अधिकृतित DGN		 चितरंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS, INDIA				
2	DY.CEE/ D	CLASS OF LOCO WAP-4 & WAG-7 & SIZE ADDED										05-12-11	जॉचा व.अ.अ. CHD SSE	SUBHAN KAR KUMBH AKAR <small>Digitally signed by Subhan Kar DN: cn=Subhan Kar, c=IN, o=CLW, ou=CLW, email=Subhan.Kar@clw.co.in</small>					
1	AME/D&D	NOTE- 2 & WAP-5 ADDED. NO / LOCO COLUMN DELETED.										19-04-99							
परिवर्तन संख्या ALT.NO.	प्राधिकार AUTHY	वर्णन DESCRIPTION									दिनांकित बाह्य DATED INITIAL	समीक्षित स.वि.अ. / व.वि.अ. REVIEWED AEE / SEE	Pradeep Khatana <small>Digitally signed by Pradeep Khatana DN: cn=Pradeep Khatana, c=IN, o=CLW, ou=CLW, email=Pradeep.Khatana@clw.co.in</small>	पदार्थ MATL	STEEL	प्रति भार कि. ग्रा. WT. EACH IN KG			
सतह - रूखाता का मान मा. मा. 3073 / अ. मा. सं. 1302 <small>SURFACE ROUGHNESS VALUE TO IS:3073 / ISO:1302</small>		अनिर्दिष्ट सद्य - सीमा मा. मा. : 2102 / अ. मा. सं. : 2768 UNSPECIFIED TOLERANCE TO IS : 2102 / ISO : 2768									TOL. CLS.	अनुमोदित स.यु.वि.अ. APPROVED DYCEE	SYAMA PRASAD PATRA <small>Digitally signed by SYAMA PRASAD PATRA DN: cn=SYAMA PRASAD PATRA, c=IN, o=CLW, ou=CLW, email=SYAMA.PATRA@clw.co.in</small>	विशिष्टि SPECN	ASTM A108				
धातु-वेल्डन चिन्ह मा. मा. : 813 / अ. मा. सं. : 2553 <small>WELDING SYMBOLS TO IS:813 / ISO:2553</small>												दिनांक DATE	23-11-20	वर्णन DESCRIPTION	COUPLING QUICK DISCONNECT (PARALLEL)				
पदांक GRADE NO.	सं1 N1	सं2 N2	सं3 N3	सं4 N4	सं5 N5	सं6 N6	सं7 N7	सं8 N8	सं9 N9	सं10 N10	सं11 N11	सं12 N12	रैखिक अनुपात SCALE	1:1	आरेखण संख्या DRAWING NO.	1209-18.406-095			
Rz	0.16-0.3	0.5-0.7	0.9-1.1	1.5-2.0	2.5-3.8	5.0-6.3	9.0-12	16-25	30-40	50-63	75-100	160-250							
Ra μm	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50							
चिन्ह SYMBOL																संदर्भ / REF. IA072-00023 ALT.-0			
															परिवर्तन संख्या ALTERATION. NO.	2	पर्ण SHEET	1 OF 1	A4

5070994/2026/O/o Dy.CEE/DKAE/CLW










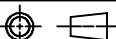
NOTES:

1. REMOVE ALL BURRS & SHARP EDGES.
2. TO BE ZINC PLATED (10 μ)/PASSIVATED.
3. ALL DIMENSIONS ARE IN MM EXCEPT OTHERWISE STATED.
4. ISO 7/1 & ISO 228/1 FOR TAPER AND PARALLEL THREADS RESPECTIVELY.
5. TEES ARE TO BE MACHINED FROM FORGED BLANK AND NOT TO BE CAST.

3

SL.NO.	SIZE 'P' FEMALE PARALLEL THREAD TO ISO 228/1	L (MIN)	O.D (MIN)
1	3/8"	14.2 ⁺⁵ / ₋₀	22
2	1/2"	14.2 ⁺⁵ / ₋₀	25

USED FOR LOCO WAG-9, WAP-5

															अभिकल्पित DGN				 चिततरंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS, INDIA				
3		ITEM NO. 2 ADDED & O.D COLUMN ADDED										10-04-18		जॉचा व.अ.अ. CHD SSE		SUBHAN NKAR KUMBH AKAR <small>Digitally signed by SUBHAN NKAR KUMBHAKAR Date: 2023.08.23 12:12:52 +05'30'</small>							
2		REDRAWN IN NX WITH 3RD ANGLE PROJECTION										28-04-11											
1	AME/D&D	DIMENSIONS 30 & Ø 22 ADDED.										30-04-02											
परिवर्तन संख्या ALT.NO.		प्राधिकार AUTHY		वर्णन DESCRIPTION						दिनांकित बाधक DATED INITIAL		समीक्षित स.वि.अ. / व.वि.अ. REVIEWED AEE / SEE		Pradeep Khataone <small>Digitally signed by Pradeep Khataone Date: 2023.09.02 14:14:18 +05'30'</small>									
सतह - रूखाता का मान या. मा. 3073 / अ. मा. सं. 1302 <small>SURFACE ROUGHNESS VALUE TO IS:3073 / ISO:1302</small>		अनिर्दिष्ट सद्य - सीमा या. मा. : 2102 / अ. मा. सं. : 2768 UNSPECIFIED TOLERANCE TO IS : 2102 / ISO : 2768						TOL. CLS.		अनुमोदित स.यु.वि.अ. APPROVED DYCEE		SYAMA PRASAD PATRA <small>Digitally signed by SYAMA PRASAD PATRA Date: 2023.08.15 12:51:53 +05'30'</small>		पदार्थ MATL STEEL		प्रति भार कि. ग्रा. WT. EACH IN KG							
		घातु-वेल्डन चिन्ह या. मा. : 813 / अ. मा. सं. : 2553 WELDING SYMBOLS TO IS:813 / ISO:2553												विशिष्ट SPECN ASTM A108									
पदांक GRADE NO.		सं1 N1	सं2 N2	सं3 N3	सं4 N4	सं5 N5	सं6 N6	सं7 N7	सं8 N8	सं9 N9	सं10 N10	सं11 N11	सं12 N12	दिनांक DATE 03-02-21		वर्णन DESCRIPTION 4 WAY EQUAL TEE (PARALLEL THREAD)							
Rz		0.16-0.3	0.5-0.7	0.9-1.1	1.5-2.0	2.5-3.8	5.0-6.3	9.0-12	16-25	30-40	50-63	75-100	160-250	रेखिक अनुपात SCALE 1:1		आरेखण संख्या DRAWING NO. 1209-18.406-199							
Ra μm		0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50	संदर्भ / REF.									
चिन्ह SYMBOL														ALT -				परिवर्तन संख्या ALTERATION. NO. 3		पर्ण SHEET 1 OF 1		A4	