

2½" (Ø 105 mm) Technical Information Tank Unit (Adapter) and Hose Unit (Coupler)



According to NATO STANAG 3756

Material	Maximum Working Pressure	Test Pressure	Minimum Burst Pressure
Aluminium	10 bar / 145 psi	15 bar / 218 psi	50 bar / 726 psi
Brass/Gunmetal	16 bar / 232 psi	24 bar / 348 psi	80 bar / 1160 psi
Stainless Steel	25 bar / 363 psi	37,5 bar / 544 psi	125 bar / 1813 psi
Titan	25 bar / 363 psi	37,5 bar / 544 psi	125 bar / 1813 psi
Hastelloy	25 bar / 363 psi	37,5 bar / 544 psi	125 bar / 1813 psi
PEEK	6 bar / 87 psi	9 bar / 131 psi	30 bar / 435 psi

Connections

2½" and 3" in BSP, NPT and flanged inlet.

Applications

For road and rail tanker bottom loading/unloading, tanks and containers, or on any application where product contamination and spillage needs to be minimized.

Media

Petroleum products: gasoline, diesel, oil etc.
 Chemical products: ethylene oxide, propylene oxide, acrylonitrile, butadiene, ammonia, vinyl chloride, toluene, xylene, sulphuric acid, phenol etc.
 Gas: vapor recovery/balance systems for various media.
 Dry powder

Material of Body

Aluminium, brass/gunmetal, stainless steel, Hastelloy and PEEK. Other materials on request.

Seals

Standard seals in FPM (Viton®), EPDM, Chemraz®, Kalrez®, NBR. Other materials on request.

High Flow Rates / Low Pressure Drop

Allows maximum product transfer with minimal losses.

Recommended Maximum Flow Rates

1500 litres/minute (fuel)

Selectivity

- avoid mixing products

To avoid product contamination caused by connecting a hose unit to the wrong tank unit, selective versions of the hose and tank units are available.

Each unit has a number of selective positions, designated by a coded part number according to the coupling size – specify when placing order. See page 32 ff.

Interchangeability

Compatible with couplings of other manufacturers.

Hose Unit with Integrated Swivel

All hose units are supplied with an integrated swivel.

2½" (Ø 105 mm) Tank Unit (Adapter) – Female Thread

Connection ¹⁾ Inch/DN	Body Material ²⁾	Seal		Weight ≈		Mann Tek Code No.	
		O-Ring ³⁾	Thread Seal	kg	lbs		
F 2½" BSP	Al	Standard: FPM/FKM (Viton®)	PUR (Polyurethane)	1,0	2,2	T312D1101B	
F 3" BSP				1,0	2,2	T314D1101B	
F 2½" NPT			—	1,0	2,2	T313D1101	
F 3" NPT			—	1,1	2,4	T315D1101	
F 2½" BSP	GM		Other on request.	PUR (Polyurethane)	2,7	6,0	T312D2201B
F 3" BSP					2,9	6,4	T314D2201B
F 2½" NPT				—	2,9	6,4	T313D2201
F 3" NPT				—	3,2	7,1	T315D2201
F 2½" BSP	SS	Other on request.		PTFE (Teflon®)	2,5	5,5	T312B4401A
F 3" BSP					3,1	6,8	T314B4401A
F 2½" NPT				—	2,7	6,0	T313B4401
F 3" NPT				—	3,7	8,2	T315B4401
F 2½" BSP	Hastelloy		Other on request.	PTFE (Teflon®)	2,6	5,7	T312A7701A
F 3" BSP					—	—	T314A7701A
F 2½" NPT				—	—	T313A7701	
F 3" NPT				—	—	T315A7701	
F 2½" BSP	PEEK	Other on request.		PTFE (Teflon®)	—	—	T312A9901A
F 3" BSP					—	—	T314A9901A
F 2½" NPT				—	—	T313A9901	
F 3" NPT				—	—	T315A9901	

According to
NATO STANAG 3756



¹⁾ F = Female thread, BSP = EN ISO 228, NPT = ANSI B1.20.1

²⁾ Material: Al = Aluminium, GM = Gunmetal, SS = Stainless Steel

³⁾ Standard seal FPM/FKM. Alternative materials, e.g. EPDM, Chemraz®, Kalrez®, NBR or HNBR on request.

Viton® and Teflon® are registered trademarks of DuPont, DuPont Elastomers.

2½" (Ø 105 mm) Tank Unit (Adapter) – Male Thread

Connection ¹⁾ Inch/DN	Body Material ²⁾	Seal ³⁾	Weight ≈		Mann Tek Code No.	
		O-Ring	kg	lbs		
2½" BSP	Al	Standard: FPM/FKM (Viton®)	1,0	2,2	T380A1101	
3" BSP			—	—	T382A1101	
2½" NPT			—	—	T381A1101	
3" NPT			—	—	T383A1101	
2½" BSP	GM		Other on request.	—	—	T380A2201
3" BSP				—	—	T382A2201
2½" NPT				—	—	T381A2201
3" NPT				—	—	T383A2201
2½" BSP	SS	Other on request.		—	—	T380A4401
3" BSP				—	—	T382A4401
2½" NPT				—	—	T381A4401
3" NPT				—	—	T383A4401

According to
NATO STANAG 3756



¹⁾ M = Male thread, BSP = EN ISO 228, NPT = ANSI B1.20.1

²⁾ Material: Al = Aluminium, GM = Gunmetal, SS = Stainless Steel

³⁾ Standard seal FPM/FKM. Alternative materials, e.g. EPDM, Chemraz®, Kalrez®, NBR or HNBR on request.

Viton® and Teflon® are registered trademarks of DuPont, DuPont Elastomers.

2½" (Ø 105 mm) Tank Unit (Adapter) – Flanged Inlet

Flange ¹⁾	Body Material ²⁾	Seal ³⁾	Weight ≈		Mann Tek Code No.
		O-Ring	kg	lbs	
undrilled Ø 210 mm	Al	Standard: FPM/FKM (Viton®)	2,1	4,6	T320D1101
DN 65 PN 10/16 Type A			1,6	3,5	T333D1101
DN 80 PN 10/16 Type A			1,8	4,0	T336D1101
2½" ASA 150			1,7	3,8	T359D1101
3" ASA 150			1,8	4,0	T361D1101
DIN 28459 'TW 1' / DN 80			1,3	2,9	T365D1101
DIN 28459 'TW 3' / DN 100			1,7	3,8	T366D1101
3" TTMA			1,4	3,1	T367D1101
4" TTMA			1,5	3,3	T368D1101
undrilled Ø 210 mm			GM	Standard: FPM/FKM (Viton®)	6,2
DN 65 PN 10/16 Type B	4,9	10,8			T333D2201
DN 65 PN 25/40 Type B					T334D2201
DN 80 PN 10/16 Type B					T336D2201
DN 80 PN 25/40 Type B					T337D2201
2½" ASA 150	4,4	9,7			T359D2201
2½" ASA 300					T360D2201
3" ASA 150	4,4	9,7			T361D2201
3" ASA 300					T362D2201
DIN 28459 'TW 1' / DN 80	4,4	9,7			T365D2201
DIN 28459 'TW 3' / DN 100			T366D2201		
3" TTMA			T367D2201		
4" TTMA			T368D2201		
undrilled Ø 210 mm	SS	Other on request.			T320B4401
o. Bohrungen Ø 210 mm **)					T320B4401F
DN 65 PN 25/40 Type E *)					T332B4401
DN 65 PN 10/16 Type B			4,2	9,3	T333B4401
DN 65 PN 10/16 Type B **)					T333B4401F
DN 65 PN 25/40 Type B			4,3	9,5	T334B4401
DN 65 PN 25/40 Type B **)			4,3	9,5	T334B4401F
DN 80 PN 10/16 Type E *)					T335B4401
DN 80 PN 10/16 Type B			4,7	10,4	T336B4401
DN 80 PN 10/16 Type B **)					T336B4401F
DN 80 PN 25/40 Type B					T337B4401
DN 80 PN 25/40 Type B **)					T337B4401F
2½" ASA 150			4,0	8,8	T359B4401
2½" ASA 150 **)					T359B4401F
2½" ASA 300			4,5	9,9	T360B4401
2½" ASA 300 **)			4,5	9,9	T360B4401F
3" ASA 150			4,5	9,9	T361B4401
3" ASA 150 **)					T361B4401F
3" ASA 300					T362B4401
3" ASA 300 **)					T362B4401F
DIN 28459 'TW 1' / DN 80			T365B4401		
DIN 28459 'TW 3' / DN 100			T366B4401		
3" TTMA			T367B4401		
4" TTMA			T368B4401		

According to
NATO STANAG 3756



*) Type E (with spigot),
EN 1092-1, see page 44

***) Flange with standard thickness

1) PN 10/16/25/40 = EN 1092
(types see page 44),
ASA = ANSI B16.5 (150 o. 300 psi),
DIN 28459 = old standard TW, 10 bar.
TTMA = Standard of the Truck Trailer
Manufacturers Association

2) Material: Al = Aluminium,
GM = Gunmetal, SS = Stainless Steel

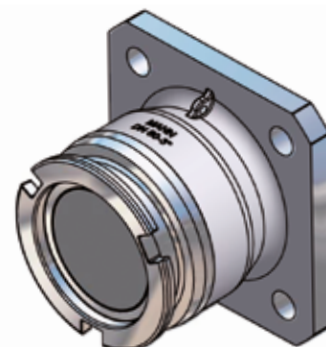
3) Standard seal FPM/FKM. Alternative
materials, e.g. EPDM, Chemraz®,
Kalrez®, NBR or HNBR on request.

Viton® is a registered trademark of DuPont,
DuPont Elastomers.

2½" (Ø 105 mm) Tank Unit (Adapter) with Square Flange Connection

Flange ¹⁾	Body Material ²⁾	Seal ³⁾	Weight ≈		Mann Tek Code No.
		O-Ring	kg	lbs	
Normec (120 x 120 mm)	Al	Standard: FPM/FKM (Viton®)			T3107D1101
Normec (120 x 120 mm)	GM				T3107D2201

According to
NATO STANAG 3756



1) Normec = with drilling for Italian road tanker connection

2) Material: Al = Aluminium, GM = Gunmetal

3) Standarddichtung FPM/FKM. Alternative Materialien,
z. B. EPDM, Chemraz®, Kalrez®, NBR oder HNBR auf Anfrage

Viton® is a registered trademark of DuPont, DuPont Elastomers.

2½" (Ø 105 mm) Hose Unit (Coupler) – Female Thread

Connection ¹⁾ Inch/DN	Body Material ²⁾	Seal		Weight ≈		Mann Tek Code No.
		O-Ring ³⁾	Thread Seal	kg	lbs	
F 2½" BSP	Al	Standard: FPM/FKM (Viton®)	PUR (Polyurethan)	3,3	7,3	S312B1101B
F 3" BSP			3,6	7,9	S314B1101B	
F 2½" NPT			—	3,4	7,5	S313B1101
F 3" NPT			3,5	7,7	S315B1101	
F 2½" BSP	GM		PUR (Polyurethan)	7,3	16,1	S312B2201B
F 3" BSP			7,4	16,3	S314B2201B	
F 2½" NPT			—	—	—	S313B2201
F 3" NPT			7,6	16,8	S315B2201	
F 2½" BSP	SS		PTFE	6,7	14,8	S312B4401A
F 3" BSP			6,6	14,6	S314B4401A	
F 2½" NPT			—	6,6	14,6	S313B4401
F 3" NPT			6,6	14,6	S315B4401	
F 2½" BSP	Hastelloy	PTFE	6,8	15,0	S312A7701A	
F 3" BSP		—	—	—	S314A7701A	
F 2½" NPT		—	—	—	S313A7701	
F 3" NPT		—	—	—	S315A7701	
F 2½" BSP	PEEK	PTFE	—	—	S312A9901A	
F 3" BSP		—	—	—	S314A9901A	
F 2½" NPT		—	—	—	S313A9901	
F 3" NPT		—	—	—	S315A9901	

According to
NATO STANAG 3756



2½" (Ø 105 mm) Coupler – Flanged Inlet

Flange ^{1B)}	Body Material ²⁾	Seal ³⁾	Weight ≈		Mann Tek Code No.		
		O-Ring	kg	lbs			
undrilled Ø 210 mm	Al	Standard: FPM/FKM (Viton®)	—	—	S320B1101		
DN 65 PN 10 / 16 Type A			10,0	22,1	S333B1101		
DN 80 PN 10 / 16 Type A			—	—	S336B1101		
2" ASA 150			—	—	S357B1101		
2½" ASA 150			—	—	S359B1101		
3" ASA 150			—	—	S361B1101		
DIN 28459 'TW 1' / DN 80			—	—	S365B1101		
DIN 28459 'TW 3' / DN 100			—	—	S366B1101		
3" TTMA			—	—	S367B1101		
4" TTMA			—	—	S368B1101		
undrilled Ø 210 mm			GM	Standard: FPM/FKM (Viton®)	—	—	S320B2201
DN 65 PN 10 / 16 Type B					—	—	S333B2201
DN 65 PN 25 / 40 Type B	—	—			S334B2201		
DN 80 PN 10 / 16 Type B	—	—			S336B2201		
DN 80 PN 25 / 40 Type B	—	—			S337B2201		
2" ASA 150	—	—			S357B2201		
2½" ASA 150	—	—			S359B2201		
2½" ASA 300	—	—			S360B2201		
3" ASA 150	—	—			S361B2201		
3" ASA 300	—	—			S362B2201		
DIN 28459 'TW 1' / DN 80	—	—			S365B2201		
DIN 28459 'TW 3' / DN 100	—	—			S366B2201		
3" TTMA	—	—	S367B2201				
4" TTMA	—	—	S368B2201				
undrilled Ø 210 mm	SS	Other on request.	—	—	S320B4401		
undrilled Ø 210 mm**)			—	—	S320B4401F		
DN 65 PN 25 / 40 Type E*)			—	—	S332B4401		
DN 65 PN 10 / 16 Type B			10,0	22,1	S333B4401		
DN 65 PN 10 / 16 Type B**)			—	—	S333B4401F		
DN 65 PN 25 / 40 Type B			—	—	S334B4401		
DN 65 PN 25 / 40 Type B**)			—	—	S334B4401F		
DN 80 PN 10 / 16 Type E*)			—	—	S335B4401		
DN 80 PN 10 / 16 Type B			—	—	S336B4401		
DN 80 PN 10 / 16 Type B**)			—	—	S336B4401F		
DN 80 PN 25 / 40 Type B			—	—	S337B4401		
DN 80 PN 25 / 40 Type B**)			—	—	S337B4401F		
2" ASA 150		—	—	S357B4401			
2" ASA 150**)		—	—	S357B4401F			
2½" ASA 150		6,6	14,6	S359B4401			
2½" ASA 150**)		6,6	14,6	S359B4401F			
2½" ASA 300		—	—	S360B4401			
2½" ASA 300**)		—	—	S360B4401F			
3" ASA 150		—	—	S361B4401			
3" ASA 150**)		—	—	S361B4401F			
3" ASA 300		—	—	S362B4401			
3" ASA 300**)		—	—	S362B4401F			
DIN 28459 'TW 1' / DN 80		—	—	S365B4401			
DIN 28459 'TW 3' / DN 100		—	—	S366B4401			
3" TTMA		—	—	S367B4401			
4" TTMA		—	—	S368B4401			

According to
NATO STANAG 3756



*) Type E (with spigot),
EN 1092-1, see page 44

***) Flange with standard thickness

1A) F = Female thread, BSP = EN ISO 228,
NPT = ANSI B1.20.1

1B) PN 10 / 16 / 25 / 40 = EN 1092
(types see page 44),
ASA = ANSI B16.5 (150 o. 300 psi),
DIN 28459 = old standard TW, 10 bar.
TTMA = Truck Trailer Manufacturers Association

2) Material: Al = Aluminium, GM = Gunmetal,
SS = Stainless Steel

3) Standard seal FPM/FKM. Alternative
materials, e.g. EPDM, Chemraz®, Kalrez®,
NBR or HNBR on request

Viton® and Teflon® are registered
trademarks of DuPont, DuPont Elastomers.