D3.1 Set of stellar and wind parameters

This deliverable summarises the results in terms of stellar and wind parameters, as well as parameters related to circumstellar matter obtained for the massive stars in diverse evolutionary states, studied during the POEMS project implementation. For each, reference to the publication, in which these results were obtained, is given. The objects are grouped with respect to category.

Yellow hypergiant stars					
Object	Spectral Type	Reference	Parameters	Comments	
HD 7583		Kourniotis et al. (2022) - MNRAS https://doi.org/ 10.1093/mnras/stac386	T_{eff} = 9800 K, log (L/L _{sun}) = 5.77, A _v =0.69 (2017-08)	Spectra synthesis by Turbospectrum & MARCS.	
HD 33579		Kourniotis et al. (2022) - MNRAS <u>https://doi.org/</u> 10.1093/mnras/stac386	T_{eff} = 9000 K, log (L/L _{sun}) = 5.94, A _v =0.69 (2017-08)	Spectra synthesis by Turbospectrum & MARCS.	
HR 179821		van Generen et al. (2019) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/201834358</u>	Blue loop: Range in log T_{eff} : 3.69-3.83 Range in log L/L _{sun} : 5.20-5.10 Range in (B-V): 0.22		
HD 224014 (ρ Cas)	F8 - G0 to G5 0?	Glatzel & Kraus (2024) https://doi.org/ 10.1093/mnras/stae861	Pulsation periods between 16 - 292 d.	Analysis of strange mode instabilities	
		Kraus et al. (2022) - IAUS <u>https://doi.org/</u> <u>10.1017/</u> <u>S1743921322000060</u>	$\label{eq:eff} \begin{array}{l} T_{eff} = 7000 \ K \\ log \ L/L_{sun} = 5.7 \\ Mass \sim 24.1 \ M_{sun} \\ Quasi-periods \ between \ 200 \ and \ 400 \ days. \end{array}$		
		van Generen et al.	Red loop:		

		(2019) - A&A https://doi.org/ 10.1051/0004- 6361/201834358	Range in log T_{eff} : 3.72-3.66 Range in log L/L _{sun} : 5.48-5.54 Range in (B-V): 0.40	
HD 268757		Kourniotis et al. (2022) - MNRAS https://doi.org/ 10.1093/mnras/stac386	T_{eff} = 4950 K, log (L/L _{sun}) = 5.64, A _v =0.92 (2017-08)	Spectra synthesis by Turbospectrum & MARCS.
HD 269723		Kourniotis et al. (2022) - MNRAS https://doi.org/ 10.1093/mnras/stac386	$T_{eff} = 5800 \text{ K, } \log (L/L_{sun}) = 5.76, A_v = 1.31 (2014-11)$ $T_{eff} = 6000 \text{ K} (2016-10)$ $T_{eff} = 5800 \text{ K} (2017-08)$	Spectra synthesis by Turbospectrum & MARCS.
	G4 0?	Glatzel & Kraus (2024) https://doi.org/ 10.1093/mnras/stae861	Pulsation periods ~750 d	Analysis of strange mode instabilities
HD 269953		Kourniotis et al. (2022) - MNRAS <u>https://doi.org/</u> <u>10.1093/mnras/stac386</u>	$T_{eff} = 7250 \text{ K, } \log (L/L_{sun}) = 5.79, A_v = 1.28 (2014-11)$ $T_{eff} = 7050 \text{ K} (2015-10)$ $T_{eff} = 7100 \text{ K} (2016-07)$ $T_{eff} = 7050 \text{ K} (2016-10)$ $T_{eff} = 7300 \text{ K} (2017-08)$	Spectra synthesis by Turbospectrum & MARCS.
HD 270086		Kourniotis et al. (2022) - MNRAS https://doi.org/ 10.1093/mnras/stac386	T_{eff} = 10150 K, log (L/L _{sun}) = 5.68, A _v =0.94 (2017-08)	Spectra synthesis by Turbospectrum & MARCS.
HD 271182		Kourniotis et al. (2022) - MNRAS https://doi.org/ 10.1093/mnras/stac386	$T_{eff} = 6100 \text{ K, } \log (L/L_{sun}) = 5.65, A_v = 0.66 (2016-12)$ $T_{eff} = 6500 \text{ K} (2017-08)$	Spectra synthesis by Turbospectrum & MARCS.
	F8 0?	Glatzel & Kraus (2024) https://doi.org/ 10.1093/mnras/stae861	Pulsation period ~750 d	Analysis of strange mode instabilities.

HD 271192		Kourniotis et al. (2022) - MNRAS https://doi.org/ 10.1093/mnras/stac386	$T_{eff} = 10300 \text{ K, } \log (L/L_{sun}) = 5.48, A_v = 0.68 (2017-08)$ $T_{eff} = 10400 \text{ K} (2017-08)$	Spectra synthesis by Turbospectrum & MARCS.
HR 8752		van Generen et al. (2019) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/201834358</u>	Red loop: Range in log T_{eff} : 3.72-3.70 Range in log L/L _{sun} : 5.25-5.38 Range in (B-V): 0.16 Blue loop: Range of log T_{eff} : 3.70-3.90 Range of log L/L _{sun} : 5.60-5.36 Range in (B-V): 0.64	
HR 5171A		van Generen et al. (2019) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/201834358</u>	Red loop: Range in log T_{eff} : 3.70-3.65 Range in log L/L _{sun} : 5.40-5.30 Range in (B-V): 0.35	
[FMR2006] 15	G6 I	Kraus et al. (2023) - Gal. <u>https://doi.org/</u> <u>10.3390/</u> galaxies11030076	$T_{CO} = 3000 \text{ K (ring temperature)}$ $N_{CO} = 2.0 \times 10^{21} \text{ cm}^{-2} \text{ (column density)}$ $v_{rot} = 0 - 20 \text{ km s}^{-1} \text{ (rotation speed of the ring)}$ $^{12}CO/^{13}CO = 4 \text{ (isotope abundance)}$ $R_* = 30 \text{ R}_{sun}$ $M_* = 25 \text{ M}_{sun}$ $r_{CO}/(\sin i)^2 = 218 \text{ R}_*$	CO molecular band fittings.
IRAS 17163-3907		Oudmaijer & Koumpia (2022) https://doi.org/ 10.1017/ S1743921322000114	Varied mass-loss rates and maximum timescales from 30 yr up to 120 yr. For modelling Na I and Mg II emission: T ~ 6750 K, log $n_H = 13.2 \text{ cm}^{-3}$, and ratio of thickness to radius $\rho \sim$ 0.1. For modelling Br γ line profile T = 5000 to 5500 K, log $n_H \sim 11.6$ to 12.8 cm ⁻³ . Modelled SED with black body at 8500 K plus 3	

			shells.	
IRC+10420	F8-G0 I	Koumpia et al. (2022) - MNRAS <u>https://doi.org/</u> 10.1093/mnras/stac1998	v _{wind} in the range 30 - 100 km s ⁻¹ Opening angle of hour-glass geometry between 3° and 10°. No significant spectral variability over the last 25 yr.	

	Supergiant B[e] stars					
Object	Spectral Type	Reference	Parameters	Comments		
ARBD 54	A0-A1 I	Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{array}{l} (B-V)_0 = 0.01 \\ M_{bol} = -6.08 \\ T_{eff} = 9500 \ K \\ log(L/L_{sun}) = 4.33 \\ R/R_{sun} = 54 \end{array}$			
Hen 3-938	B0-B1 I	Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{array}{l} (B-V)_0 = -0.21 \\ M_{bol} = -7.75 \\ T_{eff} = 23400 \ K \\ log(L/L_{sun}) = 5.00 \\ R/R_{sun} = 19 \end{array}$			
Hen 3-1398	B0-1 Ia	Aidelman et al. (2023) - A&A <u>https://doi.org/10.1051/0004-</u> <u>6361/202244938</u>	Teff = 25000 K log g = 2.9 Mv = -6.43 Mbol = -8.62 Av = 2.39 log(L/Lsun) = 5.34 d = 8536 pc	BCD system. Proposed object type: sgB[e].		
HD 62623	B9 Ib	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	Teff = 11136 K log g = 1.5 Mv = -6.25 Mbol = -6.75	BCD system. Proposed object type: sgB[e].		

			Av = 1.09 log(L/Lsun) = 4.59 d = 662 pc	
MWC 137		Parida et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3626	Observed photometric period of 1.9 d obtained by pulsational modeling	Linear and non-linear numerical simulations
		Liimets et al. (2022) - Gal. https://doi.org/10.3390/ galaxies10020041	$T_{nebular}$ = 10000 K $n_{electron}$ from 0 to 800 cm ⁻³ Mass _{nebular} from 15 to 245 M _{sun}	
		Kraus et al. (2021) - AJ. https://doi.org/10.1093/ mnras/staa519	$\begin{split} M_v &= -7.2 \\ d &= 5.15 \text{ kpc} \\ Mass &= 37 M_{sun} \\ R &= 25 R_{sun} \\ \log L/\text{L}_{sun} &= 5.84 \\ Age &= 4.7 Myr \\ \text{Rotation rate } \Omega_{in}/\Omega_{crit} &= 0.425 \\ \text{Period} &= 1.93 d \end{split}$	
MWC 314		Liimets et al. (2022) - Gal. https://doi.org/10.3390/ galaxies10020041	Radial velocities for nebular lobes from -15 km s ⁻¹ to +40 km s ⁻¹	
MWC 349A		Kraus et al. (2020) - MNRAS https://doi.org/10.1093/ mnras/staa519	$\begin{array}{l} T_{\rm CO} \sim 1500 \ K \\ N_{\rm CO} \sim 5 \ x \ 10^{20} \ cm^{-2} \end{array}$	Object proposed as a B[e] supergiant.
MWC 819		Liimets et al. (2022) - Gal. https://doi.org/10.3390/ galaxies10020041		Unipolar lobe and possible jet.
LHA 120-S 12	B0.5 Ie	Kraus et al. (2023) - Gal. https://doi.org/10.3390/ galaxies11030076	$T_{CO} = 2800 \text{ K (ring temperature)}$ $N_{CO} = 1.5 \text{ x } 10^{21} \text{ cm}^{-2} \text{ (column density)}$ $v_{rot} = 27 \text{ km s}^{-1} \text{ (rotation speed of the ring)}$ $^{12}\text{CO}/^{13}\text{CO} = 20 \text{ (isotope abundance)}$	CO molecular band fittings.

		$R_* = 30 R_{sun}$ $M_* = 25 M_{sun}$ $r_{CO}/(\sin i)^2 = 218 R_*$	
LHA 120-S59	Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{split} M_{bol} &= -6.85 \\ T_{eff} &= 17500 \text{ K} \\ log(L/L_{sun}) &= 4.63 \\ R/R_{sun} &= 23 \end{split}$	
LHA 120-S 134	Kraus et al. (2023) - Gal. <u>https://doi.org/10.3390/</u> g <u>alaxies11030076</u>	$T_{CO} = 2300 \text{ K (ring temperature)}$ $N_{CO} = 2.0 \text{ x } 10^{21} \text{ cm}^{-2} \text{ (column density)}$ $v_{rot} = 30 \text{ km s}^{-1} \text{ (rotation speed of the ring)}$ ${}^{12}\text{CO}/{}^{13}\text{CO} = 15 \text{ (isotope abundance)}$ $R_* = 44 \text{ R}_{sun}$ $M_* = 40 \text{ M}_{sun}$ $r_{CO}/(\sin i)^2 = 192.7 \text{ R}_*$	CO molecular band fittings.

B[e] stars					
Object	Spectral Type	Reference	Parameters	Comments	
[MA93] 1116	B1-B2 II/III/V	Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$(B-V)_0 = -0.25$ $M_{bol} = -5.99$ $T_{eff} = 21600 \text{ K}$ $\log(L/L_{sun}) = 4.29$ $R/R_{sun} = 10$		
CD-24 5721	O8 IV	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	Teff = 36667 K log g = 3.94 Mv = -4.50 Mbol = -7.00 Av = 2.29	BCD system. Proposed object type: Young B[e] / FS CMa.	

			log(L/Lsun) = 4.69 d = 4245 pc Dust disk inner radii: 4.33-54.78 / 1.86-4.7 AU	
Hen 3-847	B6 IV	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	Teff = $15133 / 14905 \text{ K}$ log g = $3.8 / 3.6$ Mv = $-1.00 / -1.25$ Mbol = $-2.00 / -2.17$ Av = $1.30 / 1.12$ log(L/Lsun) = $2.69 / 2.76$ d = $1127 / 1440 \text{ pc}$ Dust disk inner radii: $0.43-5.48 / 0.26-0.67 \text{ AU}$ Dust disk inner radii: $0.47-5.94 / 0.28-0.71 \text{ AU}$	BCD system. Parameter estimates for different observations. Proposed object type: Young B[e] / FS CMa.
HD 53367	B0 III	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	Teff = 32113 K log g = 2.9 Mv = -4.6 Mbol = -6.77 Av = 1.30 log(L/Lsun) = 4.6 d = 1131 pc Dust disk inner radii: 3.9-49.36 / 1.71-4.3 AU	BCD system. Proposed object type: Young B[e] / FS CMa.
HD 58647	B9 IV	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	Teff = 12203 K log g = 3.4 Mv = -0.50 Mbol = -1.25 Av = 0.00 log(L/Lsun) = 2.39 d = 295 pc Dust disk inner radii: 0.31-3.88 / 0.2-0.5 AU	BCD system. Proposed object type: Slightly evolved B[e].
IRAS 07080+0605	A0-A1 II B0-B1 II/III/V	Condori et al. (2019) - MNRAS https://doi.org/10.1093/ mnras/stz1540	$\begin{array}{l} (B-V)_0 = -0.01 \\ M_{bol} = 3.06 \\ T_{eff} = 9700 \ K T_{eff} = 10100 \ K \\ log(L/L_{sun}) = 0.67 \end{array}$	

			$R/R_{sun} \sim 1$	
IRAS 07080+0605		Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{array}{l} (B-V)_0 = -0.28 \\ M_{bol} = 3.06 \\ T_{eff} = 26000 \ K \\ log(L/L_{sun}) = 0.67 \\ R/R_{sun} \sim 1 \end{array}$	
IRAS 07377-2523	B8-B9	Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{split} T_{eff} &= 12000 \text{ K} \\ M_{bol} &= -2.40 \\ T_{eff} &= 12000 \text{ K} \\ log(L/L_{sun}) &= 2.86 \\ R/R_{sun} &= 6 \end{split}$	
IRAS 07455-3143	~B8	Condori et al. (2019) - MNRAS https://doi.org/10.1093/ mnras/stz1540	$\begin{split} T_{eff} &= 12500 \text{ K} \\ M_{bol} &= -8.07 \\ T_{eff} &= 12500 \text{ K} \\ log(L/L_{sun}) &= 5.12 \\ R/R_{sun} &= 78 \end{split}$	
IRAS 17449-2320	A0-A2 A1-A2 II/III	Condori et al. (2019) - MNRAS https://doi.org/10.1093/ mnras/stz1540	T _{eff} = 9500 K T _{eff} = 10700 K	
IRAS 17449+2320		Condori et al. (2019) - MNRAS https://doi.org/10.1093/ mnras/stz1540	$\begin{array}{l} (B-V)_0 = 0.03 \\ M_{bol} = 0.35 \\ T_{eff} = 9350 \ K \\ log(L/L_{sun}) = 1.75 \\ R/R_{sun} \sim 3 \end{array}$	
LHA 115-N82	B8-B9 II/V A0-A2 III	Condori et al. (2019) - MNRAS https://doi.org/10.1093/ mnras/stz1540	$\begin{array}{l} (B\text{-V})_0 = -0.09 (B\text{-V})_0 = 0.06 \\ M_{bol} = 3.06 \qquad M_{bol} = -4.69 \\ T_{eff} = 11200 \ K T_{eff} = 9100 \ K \\ log(L/L_{sun}) = 0.67 log(L/L_{sun}) = 3.77 \\ R/R_{sun} \sim 1 \qquad R/R_{sun} = 31 \end{array}$	

SS 255		Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{array}{l} (B-V)_0 = -0.21 \\ M_{bol} = -3.31 \\ T_{eff} = 19500 \text{ K} \\ log(L/L_{sun}) = 3.22 \\ R/R_{sun} = \sim 4 \end{array}$	
V* FX Vel	B8-B9 III/V ≤A2 A0-A2 ~A2	Condori et al. (2019) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stz1540</u>	$\begin{split} M_{bol} &= 2.73 \\ T_{eff} &= 11500 \ K \ T_{eff} \leq 9000 \ K \ T_{eff} = 9500 \ K \\ T_{eff} &= 9000 \ K \\ log(L/L_{sun}) &= 0.81 \\ R/R_{sun} \sim 1 \end{split}$	
WRAY 15-1651	B1-B5	Arias et al. (2020) - <u>BAAA</u>	$\begin{split} n_{\rm H} &= 1.7 \ x \ 10^{12} \ cm^{-3} \\ T_{gas} &= 10^4 \ {\rm K} \\ T_{\rm CO} &= 2200 \ {\rm K} \\ N_{\rm CO} &= 4 \ x \ 10^{21} \ cm^{-2} \\ v_{rot} &= 150 \ {\rm km \ s^{-1}} \end{split}$	

O stars					
Object	Spectral Type	Reference	Parameters	Comments	
CD-43 4690	O7.5	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff} = 37 \ kK, \ log \ g = 3.61, \ R_* = 14.1 \\ R_{sun}, v_{\infty} = 2310 \ \ km \ s^{\text{-1}}, \ M_{\text{loss}} = 1.5 \ x \ 10^{\text{-6}} \\ M_{sun} \ yr^{\text{-1}} \end{array}$		
HD 30614 (α Cam)	O9 Ia	Gormaz-Matamala et al. (2021) - ApJ <u>https://doi.org/10.3847/1538-</u> <u>4357/ab05c4</u>	$T_{eff} = 28200 \text{ K}$ log g = 2.975 R* = 30.3 R _{sun} v _{turb} = 10 km s ⁻¹ v sin <i>i</i> = 100 km s ⁻¹ M _{loss} = 0.7 x 10 ⁻⁶ M _{sun} yr ⁻¹ v _∞ = 2890 km s ⁻¹		

HD 57682	O9.2 IV	Gormaz-Matamala et al. (2022) - A&A https://doi.org/10.1051/0004- 6361/202142383	$\begin{split} T_{eff} &= 35500 \ K \\ log &g &= 3.85 \\ L_* &= 70200 \ L_{sun} \\ M_* &= 12.7 \ M_{sun} \\ R_* &= 7.0 \ R_{sun} \\ v_{turb} &= 20 \ km \ s^{-1} \\ v_{macro} &= 20 \ km \ s^{-1} \\ v_{rot} &= 15 \ km \ s^{-1} \\ \Omega &= 0.02 \\ log \ M_{loss} &= -6.759 \\ v_{\infty} &= 2020 \ km \ s^{-1} \\ f_{cl} &= 2.5 \\ log \ D_{mom} &= 27.75 \end{split}$	Self-consistent wind parameters from optical line profile fitting.
HD 66811 (ξ Pup)	O4 I(n)fp	Gormaz-Matamala et al. (2019) - ApJ <u>https://doi.org/10.3847/1538-</u> <u>4357/ab05c4</u>	$\begin{split} T_{eff} &= 42 \text{ kK, } \log g = 3.6, \ R_* = 19 \ R_{sun,} \\ v_\infty &= 2500 \ \text{ km s}^{\text{-1}}, \ M_{\text{loss}} = 11 \ x \ 10^{-6} \ M_{sun} \\ yr^{-1} \\ T_{eff} &= 40 \ \text{kK, } \log g = 3.64, \ R_* = 18.7 \\ R_{sun,} v_\infty &= 2700 \ \text{ km s}^{-1}, \ M_{\text{loss}} = 5.2 \ x \ 10^{-6} \\ M_{sun} \ yr^{-1} \\ T_{eff} &= 39 \ \text{kK, } \log g = 3.6, \ R_* = 29.7 \ R_{sun,} \\ v_\infty &= 3200 \ \text{ km s}^{-1}, \ M_{\text{loss}} = 9.3 \ x \ 10^{-6} \ M_{sun} \\ yr^{-1} \end{split}$	For different stellar parameters from literature.
	O4 I(n)f	Gormaz-Matamala et al. (2021) - ApJ <u>https://doi.org/10.3847/1538-</u> <u>4357/ab05c4</u>	$T_{eff} = 41000 \text{ K}$ log g = 3.6 R* = 17.9 R _{sun} v _{turb} = 10 km s ⁻¹ v sin <i>i</i> = 210 km s ⁻¹ M _{loss} = 2.7 x 10 ⁻⁶ M _{sun} yr ⁻¹	Final values from Lambert models.

		Gormaz-Matamala et al. (2020) - <u>BAAA</u>	$\begin{split} T_{eff} &= 40000 \text{ K} \\ log &= 3.64 \\ R_* &= 18.6 R_{sun} \\ M_{loss} &= 5.2 x 10^{-6} M_{sun} yr^{-1} \\ f_{cl} &= 1.0 - 5.0 - 9.0 \end{split}$	Line profile fittings with FASTWIND code.
HD 69106	O9.7 IIn	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff}=30 \ kK, \ log \ g=3.55, \ R_{*}=14.2 \\ R_{sun,} \ v_{\infty}=1455 \ \ km \ s^{-1}, \ \ M_{loss}=0.21 \ x \\ 10^{-6} \ M_{sun} \ yr^{-1} \end{array}$	
HD 69464	O7 Ib(f)	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ac12c9	$\begin{array}{l} T_{eff} = 36 \ kK, \ log \ g = 3.51, \ R_* = 20 \ R_{sun,} \\ v_{\infty} = 2412 \ \ km \ s^{\text{-1}}, \ M_{\text{loss}} = 3.2 \ x \ 10^{\text{-6}} \ M_{sun} \\ yr^{\text{-1}} \end{array}$	
HD 76968a	O9.2 Ib	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff} = 31 \ kK, \ log \ g = 3.25, \ R_* = 21.3 \\ R_{sun}, v_{\infty} = 1212 \ \ km \ s^{-1}, \ M_{loss} = 3.5 \ x \ 10^{-6} \\ M_{sun} \ yr^{-1} \end{array}$	
HD 97848	O8 V	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff} = 36.5 \ kK, \ log \ g = 3.9, \ R_* = 8.2 \ R_{sun,} \\ v_{\infty} = 2532 \ \ km \ s^{\text{-1}}, \ M_{\text{loss}} = 0.17 \ x \ 10^{\text{-6}} \\ M_{sun} \ yr^{\text{-1}} \end{array}$	
HD 148546	O9 Iab	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff} = 31 \ kK, \ log \ g = 3.22, \ R_* = 24.4 \\ R_{sun, \ v_{\infty}} = 1300 \ \ km \ s^{\text{-1}}, \ M_{loss} = 5.3 \ x \ 10^{\text{-6}} \\ M_{sun} \ yr^{\text{-1}} \end{array}$	
HD 163758	O6.5 Iafp	Gormaz-Matamala et al. (2019) - ApJ	$\begin{array}{l} T_{eff} = 34.5 \ kK, \ log \ g = 3.41, \ R_* = 21 \\ R_{sun,} v_{\infty} = 2040 \ \ km \ s^{-1}, \ M_{loss} = 3.3 \ x \ 10^{-6} \end{array}$	

		https://doi.org/10.3847/1538- 4357/ab05c4	M _{sun} yr ⁻¹	
	O6.5 Iafp	Gormaz-Matamala et al. (2021) - ApJ <u>https://doi.org/10.3847/1538-</u> <u>4357/ab05c4</u>	$T_{eff} = 34500 \text{ K}$ log g = 3.41 $R_* = 19.1 R_{sun}$ $v_{turb} = 7 \text{ km s}^{-1}$ $v \sin i = 94 \text{ km s}^{-1}$ $M_{loss} = 1.2 \text{ x } 10^{-6} M_{sun} \text{ yr}^{-1}$ $v_{\infty} = 2740 \text{ km s}^{-1}$ $f_{cl} = 0.05$ $\beta = 0.85$ He/H = 0.15	
HD 164794	O4 V((f))z	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff} = 43.8 \ kK, \ log \ g = 3.92, \ R_* = 13.1 \\ R_{sun}, v_{\infty} = 3304 \ \ km \ s^{\text{-1}}, \ M_{loss} = 2.3 \ x \ 10^{\text{-6}} \\ M_{sun} \ yr^{\text{-1}} \end{array}$	
HD 169582	O6 Iaf	Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff}=37 \ kK, \ log \ g=3.5, \ R_{*}=27.2 \ R_{sun,} \\ v_{\infty}=3017 \ \ km \ s^{\text{-1}}, \ M_{\text{loss}}=7.1 \ x \ 10^{\text{-6}} \ M_{sun} \\ yr^{\text{-1}} \end{array}$	
HD 192639	O7.5 Iab	Gormaz-Matamala et al. (2022) - A&A https://doi.org/10.1051/0004- 6361/202142383	$\begin{array}{l} T_{eff} = 34000 \ K \\ log \ g = 3.25 \\ L_* = 473000 \ L_{sun} \\ M_* = 25.4 \ M_{sun} \\ R_* = 19.8 \ R_{sun} \\ v_{turb} = 10 \ km \ s^{-1} \\ v_{macro} = 30 \ km \ s^{-1} \\ v_{rot} = 100 \ km \ s^{-1} \\ \Omega = 0.26 \\ log \ M_{loss} = -5.783 \\ v_{\infty} = 1460 \ km \ s^{-1} \\ f_{cl} = 6.25 \end{array}$	Self-consistent wind parameters from optical line profile fitting.

			log D _{mom} = 28.83	
HD 188001 (9 Sge)	O7.5 Iab	Gormaz-Matamala et al. (2022) - A&A <u>https://doi.org/10.1051/0004-</u> <u>6361/202142383</u>	$\begin{split} T_{eff} &= 34500 \ K \\ log & g &= 3.32 \\ L_* &= 67600 \ L_{sun} \\ M_* &= 40.3 \ M_{sun} \\ R_* &= 23.0 \ R_{sun} \\ v_{turb} &= 20 \ km \ s^{-1} \\ v_{macro} &= 25 \ km \ s^{-1} \\ v_{macro} &= 90 \ km \ s^{-1} \\ \Omega &= 0.21 \\ log \ M_{loss} &= -5.632 \\ v_\infty &= 2000 \ km \ s^{-1} \\ f_{cl} &= 16.0 \\ log \ D_{mom} &= 29.14 \end{split}$	Self-consistent wind parameters from optical line profile fitting.
HD 195592	O9.7 Ia	Gormaz-Matamala et al. (2022) - A&A <u>https://doi.org/10.1051/0004-</u> <u>6361/202142383</u>	$\begin{split} T_{eff} &= 29500 \ K \\ log & g = 3.20 \\ L_* &= 316000 \ L_{sun} \\ M_* &= 26.7 \ M_{sun} \\ R_* &= 21.5 \ R_{sun} \\ v_{turb} &= 10 \ km \ s^{-1} \\ v_{macro} &= 25 \ km \ s^{-1} \\ v_{macro} &= 25 \ km \ s^{-1} \\ \Omega_{rot} &= 60 \ km \ s^{-1} \\ \Omega_{2} &= 0.15 \\ log \ M_{loss} &= -5.369 \\ v_{\infty} &= 1390 \ km \ s^{-1} \\ f_{cl} &= 1.0 \\ log \ D_{mom} &= 29.18 \end{split}$	Self-consistent wind parameters from optical line profile fitting.
HD 218915	O9.2 Iab	Gormaz-Matamala et al. (2022) - A&A https://doi.org/10.1051/0004- 6361/202142383	$\begin{split} T_{eff} &= 31000 \ K \\ log &= 3.23 \\ L_* &= 270000 \ L_{sun} \\ M_* &= 20.1 \ M_{sun} \\ R_* &= 18.0 \ R_{sun} \\ v_{turb} &= 20 \ km \ s^{-1} \end{split}$	Self-consistent wind parameters from optical line profile fitting.

HD 210809	O9 Iab	Gormaz-Matamala et al. (2022) - A&A https://doi.org/10.1051/0004- 6361/202142383	$\begin{split} T_{eff} &= 31500 \ K \\ log &g = 3.20 \\ L_* &= 430000 \ L_{sun} \\ M_* &= 28.0 \ M_{sun} \\ R_* &= 22.0 \ R_{sun} \\ v_{turb} &= 20 \ km \ s^{-1} \\ v_{macro} &= 25 \ km \ s^{-1} \\ v_{rot} &= 100 \ km \ s^{-1} \\ \Omega &= 0.2 \\ log \ M_{loss} &= -5.593 \\ v_{\infty} &= 1340 \ km \ s^{-1} \\ f_{cl} &= 2.2 \\ log \ D_{mom} &= 28.98 \end{split}$	Self-consistent wind parameters from optical line profile fitting.
HD 302505		Gormaz-Matamala et al. (2019) - ApJ https://doi.org/10.3847/1538- 4357/ab05c4	$\begin{array}{l} T_{eff} = 34 \; kK, \; log \; g = 3.6, \; R_* = 14.1 \; R_{sun,} \\ v_{\infty} = 2331 \; \; km \; s^{\text{-1}}, \; M_{\text{loss}} = 0.68 \; x \; 10^{\text{-6}} \\ M_{sun} \; yr^{\text{-1}} \end{array}$	

B and A supergiant stars				
Object	Spectral Type	Reference	Parameters	Comments
HD 21389 (CE Cam)	A0 Ia	Pivoňková et al. (2022) - <u>AAJ</u>	Mv = -7.56 V = 4.54 mag. B = 5.10 mag.	Long and short-term variability. High- Velocity Absorption events detected.

			Parallax = 0.930 mas. T_{eff} = 9730 K M_* = 19.3 M_{sun} R_* = 55 R_{sun} log L*/L _{sun} = 4.87 log g = 1.7 v sin <i>i</i> = 53 km s ⁻¹ v _{esc} = 233 km s ⁻¹ M_{loss} = 4.2 x 10 ⁻⁷ d = 1084 pc	
HD 34085 (Rigel)	B8 Iae	Venero et al. (2024) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stad3030</u>		Obtained from line profile fittings to Hα
HD 41117 (χ ² Ori)	B2 Ia	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
HD 42087 (PU Gem)	B4 Ia	Sánchez Arias et al. (2023) - Gal. <u>https://doi.org/10.3390/</u> <u>galaxies11050093</u>	$\begin{split} T_{eff} &= 18400 \ K \\ log &= 2.34 \\ v \sin i = 73.4 \ km \ s^{-1} \\ v_{turb} &= 10 \ km \ s^{-1} \\ M_{loss} &= 2.3 \ x \ 10^{-7} \ M_{sun} \ yr^{-1} \\ v_{\infty} &= 700 \ km \ s^{-1} \\ \beta &= 2 \\ L_* &= 312700 \ L_{sun} \\ M_* &= 24.3 \ M_{sun} \\ R_* &= 55 \ R_{sun} \\ d &= 2470 \ pc \\ E(B-V) &= 0.4 \end{split}$	Obtained from unclumped CMFGEN models.
	B4 Ia	Venero et al. (2024) -	$v_{\infty} = 230.4 \text{ km s}^{-1}(\delta \text{-slow})$	Obtained from line profile fittings to

		MNRAS https://doi.org/10.1093/ mnras/stad3030		Ηα
HD 47240	B1 Ib	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
	B1 Ib	Escarate et al. (2023) - AA https://doi.org/10.1051/0004- 6361/202346587	V sin i = 106.0 km s ⁻¹	Deconvolved spectrum.
HD 52089	B1.5 II	Sánchez Arias et al. (2023) - Gal. <u>https://doi.org/10.3390/</u> galaxies11050093	$\begin{split} T_{eff} &= 23800 \text{ K} \\ log & g &= 3.40 \\ v \sin i &= 38.4 \text{ km s}^{-1} \\ v_{turb} &= 10 \text{ km s}^{-1} \\ M_{loss} &= 1.9 \text{ x } 10^{-8} \text{ M}_{sun} \text{ yr}^{-1} \\ v_{\infty} &= 900 \text{ km s}^{-1} \\ \beta &= 1 \\ L_* &= 35000 \text{ L}_{sun} \\ M_* &= 11.1 \text{ M}_{sun} \\ R_* &= 11 \text{ R}_{sun} \\ d &= 124 \text{ pc} \\ E(B-V) &= 0.005 \end{split}$	Obtained from unclumped CMFGEN models.
HD 53138 (o² CMa)	B3 Ia	Venero et al. (2024) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stad3030</u>		Obtained from line profile fittings to $H\alpha$
HD 58350 (η CMa)	B5 Ia	Sánchez Arias et al. (2023) - Gal. <u>https://doi.org/10.3390/</u> galaxies11050093	$T_{eff} = 15800 \text{ K}$ log g = 1.95 v sin i = 51.5 km s ⁻¹ v _{turb} = 12 km s ⁻¹ M _{loss} = 6.2 x 10 ⁻⁸ M _{sun} yr ⁻¹ v _{\infty} = 230 km s ⁻¹	Obtained from unclumped CMFGEN models.

	B5 Ia	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
HD 74371	B6 Iab/b	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
HD 75149	B3 Ia	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
HD 79186	B5 Ia	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
HD 80077	B2 Ia+e	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030	$v_{\infty} = 211 \text{ km s}^{-1} (\delta \text{-slow})$ $M_{\text{loss}} = 6.379 \text{ x} 10^{-6} \text{ M}_{\text{sun}} \text{ yr}^{-1} (\delta \text{-slow})$	Obtained from line profile fittings to $H\alpha$
HD 92964	B2.5 Ia	Venero et al. (2024) - MNRAS https://doi.org/10.1093/ mnras/stad3030		Obtained from line profile fittings to $H\alpha$
HD 99953	B1/2 Iab/b	Venero et al. (2024) -	v_{∞} = 152.5 km s ⁻¹ (δ-slow)	Obtained from line profile fittings to

		MNRAS https://doi.org/10.1093/ mnras/stad3030	$ \begin{split} M_{\text{loss}} &= 0.061 \text{ x } 10^{-6} M_{\text{sun}} \text{ yr}^{-1} (\delta \text{-slow}) \\ v_{\infty} &= 193.8 \text{km } \text{ s}^{-1} \text{ (fast)} \\ M_{\text{loss}} &= 0.08 \text{ x } 10^{-6} M_{\text{sun}} \text{ yr}^{-1} \text{ (fast)} \end{split} $	Ηα
HD 115842	B0.5 Ia	Escarate et al. (2023) - AA https://doi.org/10.1051/0004- 6361/202346587	V sin i = 63.5	Deconvolved spectrum.
HD 198478 (55 Cyg)	B2.5/3 I	Cidale et al. (2023) - AA https://doi.org/10.1051/0004- 6361/202245296	$\begin{split} \text{Teff} &= 18000 \text{ K} \\ \text{log g} &= 2.5 \\ \text{R}* \text{ between 57-62 } \text{R}_{\text{sun}} \\ \text{V sin i} &\sim 40 - 45 \text{ km s}^{-1} \\ \text{M}_{\text{loss}} &\sim 0.2 - 0.7 \text{ x } 10^{-6} \text{ M}_{\text{sun}} \text{ yr}^{-1} \\ \text{v}_{\infty} &= 270 \text{ km s}^{-1} \\ \text{V}_{\text{mic}} &= 15 \text{ km s}^{-1} \\ \text{V}_{\text{macro}} &\sim 25 - 30 \text{ km s}^{-1} \\ \text{Variability periods of } &\sim 13 \text{ and } 23 \text{ days.} \end{split}$	Obtained from NIR line profile fittings.
HD 206267		Escarate et al. (2023) - AA https://doi.org/10.1051/0004- 6361/202346587	V sin $i = 186.6 \text{ km s}^{-1}$	Deconvolved spectrum.

	Herbig Ae/B[e] (HAeB[e])				
Object	Spectral Type	Reference	Parameters	Comments	
HK Ori	B9 V	Aidelman et al. (2023) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/202244938</u>	$\begin{split} T_{eff} &= 11940 \ K \\ log &= 4.1 \\ M_v &= 0.06 \\ M_{bol} &= -0.78 \\ A_v &= 2.05 \\ log(L/L_{sun}) &= 2.20 \\ d &= 630 \ pc \\ Dust \ disk \ inner \ radii: \ 0.25-3.12 \ / \ 0.16-0.41 \ AU \end{split}$	BCD system. Proposed object type: Group II HAeB[e].	

HD 52721	B2 V:	Aidelman et al. (2023) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/202244938</u>	$\begin{array}{l} T_{eff} = 27361 \ K \\ log \ g = 4.4 \\ M_v = -1.61 \\ M_{bol} = -3.26 \\ A_v = 0.50 \\ log(L/L_{sun}) = 3.19 \\ d = 479 \ pc \\ Dust \ disk \ inner \ radii: \ 0.77-9.74 \ / \ 0.43-1.08 \ AU \end{array}$	BCD system. Proposed object type: Group I HAeB[e].
HD 53367	We Herbig	Rustámov et al. (2022) - OAP <u>https://doi.org/</u> <u>10.18524/1810-</u> <u>4215.2022.35.268188</u>	Period = 138.34 days.	Obtained from radial velocity curves.
HD 323771	B5 V:	Aidelman et al. (2023) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/202244938</u>	$\begin{array}{l} T_{eff} = 17500 \ K \\ log \ g = 4.3 \\ M_v = -1.20 \\ M_{bol} = -2.46 \\ A_v = 1.80 \\ log(L/L_{sun}) = 2.87 \\ d = 1432 \ pc \\ Dust \ disk \ inner \ radii: \ 0.53-6.74 \ / \ 0.31-0.79 \ AU \end{array}$	BCD system. Proposed object type: Group II HAeB[e].

FS CMa-type stars				
Object	Spectral Type	Reference	Parameters	Comments
AS 202	A1 V / A0 V	Aidelman et al. (2023) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/202244938</u>	$\begin{split} T_{eff} &= 10408 \ / \ 10335 \ K \\ log &= 4.3 \ / \ 4.5 \\ M_v &= 0.75 \ / \ 0.65 \\ M_{bol} &= -0.14 \ / \ 0.33 \\ A_v &= 0.33 \ / \ 0.56 \\ log(L/L_{sun}) &= 1.94 \ / \ 1.16 \end{split}$	BCD system. Parameter estimates for different observations. Proposed object type: FS CMa.

			d = 437 / 502 pc Dust disk inner radii: 0.18-2.31 / 0.13-0.32 AU Dust disk inner radii: 0.15-1.88 / 0.11-0.27 AU	
HD 85567	B3 III	Aidelman et al. (2023) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/202244938</u>	$\begin{split} T_{eff} &= 20000 \text{ K} \\ log &= 3.7 \\ M_v &= -2.33 \\ M_{bol} &= -3.83 \\ A_v &= 1.12 \\ log(L/L_{sun}) &= 3.42 \\ d &= 913 \text{ pc} \\ Dust disk inner radii: 1.0-12.7 / 0.54-1.36 \text{ AU} \end{split}$	BCD system. Proposed object type: FS CMa.

	LBV stars				
Object	Spectral Type	Reference	Parameters	Comments	
CPD-59 2854	B2 II	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	$T_{eff} = 21000 \text{ K}$ log g = 2.9 $M_v = -4.25$ $M_{bol} = -5.50$ $A_v = 2.02$ log(L/L _{sun}) = 4.09 d = 3505 pc	BCD system. Proposed object type: LBV.	
GR 290 (Romano's Star)	LBV - WR star	Maryeva et al. (2019) - Gal. https://doi.org/10.3390/ galaxies7030079	$\begin{array}{l} \text{log T_{eff} from 4.37$ to 4.53$} \\ \text{$R_{2/3}$ from 19$ to 54 R_{sun}} \\ \text{L_{*} [105 L_{sun}]$ from 3.7$ to 8.2$} \\ \text{$M_{loss}$ [10^{-5} M_{sun} yr^{-1}$]$ from 1.3$ to 3.5$} \\ \text{$f$ from 0.15$ to 0.25$} \\ \text{$v_{\infty}$ from 250$ to 620$ km s^{-1}} \\ \text{H/He from 1.5$ to 2.2$} \\ \text{$d$ ~ 4 kpc} \end{array}$	Values from literature. Object proposed as post-LBV, in transition phase between LBVs and Wolf-Rayet stars.	

	LBV - WR star	Maryeva et al. (2020) - A&A https://doi.org/10.3390/ galaxies7030079	Asymmetric HII region 50 (south) x30 (north-southeast)x20 (east - northwest) x10 (west) pc. Unresolved region near the star ~2 pc.	
LHA 120-S 65	B2 Ib	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	$T_{eff} = 22000 \text{ K}$ log g = 2.6 Mv = -5.67 Mbol = -7.0 Av = 0.19 log(L/Lsun) = 4.69 d = 59564 pc	BCD system. Proposed object type: LBV.
MN 112		Maryeva et al. (2022) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/stac1249</u>	$\begin{split} T_{eff} &= 17400 \text{ K} \\ R_* &= 126 \text{ Rsun} \\ d &= 13.53 \text{ pc} \\ E(B-V) &= 2.65 \\ L &= 1500000 \text{ Lsun} \\ M_{loss} &= 6.8 \times 10^{-5} \\ v_\infty &= 280 \text{ km s}^{-1} \\ \beta &= 1 \\ f &= 0.1 \\ H &= 0.37 \text{ (abundances)} \\ He &= 0.62 \\ N &= 4.0 - 8.0 \times 10^{-3} \end{split}$	Stellar parameter from CMFGEN line profile fittings.
MWC 877	B3 Ia:	Aidelman et al. (2023) - A&A https://doi.org/10.1051/0004- 6361/202244938	$\begin{split} T_{eff} &= 20000 \\ log g &= 2.5 \\ M_v &= -6.33 \\ M_{bol} &= -8.22 \\ A_v &= 4.96 \\ log(L/L_{sun}) &= 5.18 \\ d &= 1297 \end{split}$	BCD system. Proposed object type: LBV.

WR stars					
Object	Spectral Type	Reference	Parameters	Comments	
J040901.83+323955.6	[WR] or Wolf- Rayet central star of planetary nebula	Abdulkarimova et al. (2022) - OAP <u>https://doi.org/</u> <u>10.18524/1810-</u> <u>4215.2022.35.267997</u>	Low mass star from HR diagram. Short timescale photometric variability ~0.5 mag.		

	Be stars				
Object	Spectral Type	Reference	Parameters	Comments	
HD 10144		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 228 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.	
HD 33328		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 283 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.	
HD 35165		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 213 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.	
HD 35411		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 320 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.	
HD 37041		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 149 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.	

HD 37795	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 190 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 41335	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 242 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.
HD 42167	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 199 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 45725	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 340 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 45910	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 196 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 48917	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 180 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 50013	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 231 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 52918	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 305 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 56014	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 183 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 57150	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 213 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.

HD 57219		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 135 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 58715		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 284 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 60606		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 249 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 63462		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 238 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 68980 (MX Pup)	B1 V	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 152 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
	B1 V	Cochetti et al. (2023) - Gal. https://doi.org/10.3390/ galaxies11040090	Disk parameters: n = 3.0 (density power) $\rho_0 = 5x10^{-11}$ gr cm ⁻³ $i = 60^{\circ}$	Obtained by IR modelling with HDust code.
HD 71510		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 165 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 75311		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 249 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 78764		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 150 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.
HD 83953		Solar et al. (2022) - MNRAS https://doi.org/10.1093/	$v \sin i = 286 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.

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HD 89080	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 224 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 89890	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 130 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 91465	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin <i>i</i> = 286 km s ⁻¹	2 σ_{fit} values from Fourier transform.
HD 92938	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 131$ km s ⁻¹	2 σ_{fit} values from Fourier transform.
HD 93563	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 183$ km s ⁻¹	2 σ_{fit} values from Fourier transform.
HD 98058	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 223 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 102776	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 222 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 103192	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 275 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 105382	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 171 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.
HD 105435	Solar et al. (2022) - MNRAS https://doi.org/10.1093/	$v \sin i = 257 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.

	mnras/stac202		
HD 107348	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 234 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 110335	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 242 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 110432	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 181 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 112078	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 307 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.
HD 120324	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 151 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 124195	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 135 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 124367	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 248 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 124771	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 188 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 127972	Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 245 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.
HD 131492	Solar et al. (2022) - MNRAS https://doi.org/10.1093/	$v \sin i = 173 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.

		mnras/stac202		
HD 135734		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 257 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 138769		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 159 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 142983		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 227 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 143275		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 204 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 148184		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 157 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 157042		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 310 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 157246		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 257 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 167128		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 154 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 187811 (12 Vul)	B2.5 V	Cochetti et al. (2021) - A&A https://doi.org/10.1051/0004- 6361/202040143	$\begin{array}{l} \mbox{Projected } V_{\rm rot} = 42.5 \ \mbox{km s}^{-1} \\ T_{\rm CO} = 3250 \ \mbox{K} \\ N_{\rm CO} = 7.5 \mbox{x} 1020 \ \mbox{cm}^{-2} \\ V_{\rm turb} = 1.5 \ \mbox{km s}^{-1} \end{array}$	Parameters of the ring obtained by fitting ¹² CO band spectrum.
HD 205637		Solar et al. (2022) - MNRAS	$v \sin i = 225 \text{ km s}^{-1}$	$2 \; \sigma_{\text{fit}}$ values from Fourier transform.

		https://doi.org/10.1093/ mnras/stac202		
HD 209014		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 208 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 209409		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 254 \text{ km s}^{-1}$	2 σ_{fit} values from Fourier transform.
HD 212076		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 148 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
HD 212571 (π Aqr)		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 227 \text{ km s}^{-1}$	$2 \ \sigma_{\text{fit}}$ values from Fourier transform.
	B1 III-IVe	Cochetti et al. (2023) - Gal. https://doi.org/10.3390/ galaxies11040090	Disk parameters: n = 3.5 (density power) $\rho_0 = 10^{-11} \text{ gr cm}^{-3}$ $i = 45^{\circ}$	Obtained by IR modelling with HDust code.
HD 214748		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	v sin $i = 182 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 217891		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 222 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 219688		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 225 \text{ km s}^{-1}$	$2 \sigma_{\text{fit}}$ values from Fourier transform.
HD 221507		Solar et al. (2022) - MNRAS https://doi.org/10.1093/ mnras/stac202	$v \sin i = 237 \text{ km s}^{-1}$	$2 \sigma_{fit}$ values from Fourier transform.

Hot subdwarfs					
Object	Spectral Type	Reference	Parameters	Comments	
BD+18°2647		Krticka et al. (2019) - A&A <u>https://doi.org/10.1051/0004-</u> <u>6361/201936208</u>	$\begin{split} T_{eff} &= 73000 \ K \\ log \ g &= 5.95 \\ R &= 0.107 \ R_{sun} \\ Mass &= 0.38 \ M_{sun} \\ M_{loss} &< 10^{-12} \ M_{sun} \ yr^{-1} \\ v_{rad} &= 64.5 \ km \ s^{-1} \\ v \ sin \ i &= 25 \ km \ s^{-1} \\ d &= 307 \ pc \\ \epsilon_{He} &= 0.029 \\ log \ \epsilon_{C} &< -7.0 \\ log \ \epsilon_{N} &= -4.5 \\ log \ \epsilon_{O} &= -5.4 \end{split}$	From TLUSTY, SYNSPEC and METUJE codes.	
HD 49798		Krticka et al. (2019) - A&A <u>https://doi.org/10.1051/0004-</u> <u>6361/201936208</u>	$\begin{split} T_{eff} &= 45900 \ K \\ log \ g &= 4.56 \\ R &= 1.05 \ R_{sun} \\ Mass &= 1.46 \ M_{sun} \\ M_{loss} &< 10^{-12} \ M_{sun} \ yr^{-1} \\ v_{rad} &= 107.9 \ km \ s^{-1} \\ v \ sin \ i &= 40 \ km \ s^{-1} \\ d &= 508 \ pc \\ \epsilon_{He} &= 0.74 \\ log \ \epsilon_{C} &< -4.2 \\ log \ \epsilon_{N} &= -3.1 \\ log \ \epsilon_{O} &= -4.6 \end{split}$	From TLUSTY, SYNSPEC and METUJE codes.	

Symbiotic stars				
Object	Spectral Type	Reference	Parameters	Comments

BI Cru		Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 6.187, K = 5.064, IR type D	
	D-type symbiotic star	Marchiano et al. 2022 - <u>BAAA</u>	$\begin{split} T_{CO} &= 3100 \text{ K} \\ N_{CO} &= 2.5 \text{ x } 10^{21} \text{ cm}^{-2} \\ {}^{12}\text{CO}/{}^{13}\text{CO} &= 10 \\ v_{rot} &= 21 \text{ km s}^{-1} \\ R_{inner} &= 2 \text{ AU} \end{split}$	Parameters for ring of molecular gas.
RS Oph	G8	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 6.858, K = 6.5, IR type S Teq = 4760 K	Cool component spectral type determination
Hen 3-1341	К3	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 7.892, K = 7.479, IR type S T _{eq} = 4170 K	Cool component spectral type determination
CL Sco	M5	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = - , K = 7.86, IR type S T _{eq} = 3430 K	Cool component spectral type determination
SY Mus	M4	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 8.14, K = 4.593, IR type S T _{eq} = 3490 K	Cool component spectral type determination
RT Cru	M3	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 5.583, K = 5.185, IR type D Teq = 3660 K	Cool component spectral type determination
V347 Nor	M0	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 5.811, K = 4.943, IR type D T _{eq} = 3970 K	Cool component spectral type determination
KX TrA	M3	Marchiano et al. 2023 - Gal https://doi.org/10.3390/ galaxies11040080	H = 6.409, K = 5.979, IR type S T _{eq} = 3600 K	Cool component spectral type determination
V694 Mon	M2	Marchiano et al. 2023 - Gal	H = 5.471, K = 5.069, IR type S	Cool component spectral type

	https://doi.org/10.3390/ galaxies11040080	T _{eq} = 3720 K	determination
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Note: Teq is equivalent temperature.

	Binaries stars				
Object	Spectral Type	Reference	Parameters	Comments	
V4334 Sgr (Sakurai's object)		Evans et al. (2020) - MNRAS <u>https://doi.org/10.1093/</u> <u>mnras/staa343</u>	$T_{dust} \sim 1200$ K (1998), ~180 K (2016) Amorphous carbon dust mass ~ 2 x 10 ⁻⁵ M _{sun} $^{12}C/^{13}C$ ratio = 6.7 (consistent with Sakurai being a VLTP, very late thermal pulse)	Not referenced as a binary object in this paper.	
V838 Mon	B5V + L supergiant	Liimets et al. (2023) - A&A <u>https://doi.org/</u> <u>10.1051/0004-</u> <u>6361/202142959</u>	Infrared photometric magnitudes: 2010/05/11 - J=7.00, H=5.86, K=5.10 2020/03/02 - J=6.59, h=5.55, K=4.76	Extensive photometric observation available online.	
Z CMa	Herbig Be + FU Ori	Liimets et al. (2023) - Gal. https://doi.org/10.3390/ galaxies11030064	Total movement in the plane of the sky = 1.4" Proper motion μ = 0.08 (feat. C), 0.013 (feat. D) Radial velocity v_{rad} = -390 (C), -110 (D) km s ⁻¹ Tangencial velocity v_{sky} = 423, 69 km s ⁻¹ Expansion velocity v_{exp} = 576, 130 km s ⁻¹ Inclination <i>i</i> = 43°, 58° Distance from central star d ₂₀₀₂ = 67.8", 75.3" Distance from central star d ₂₀₁₉ = 69.2", 75.5" Position angle (2002) = 246.5° 222,9° Position angle (2019) = 246.6, 222.9° Age at 2002 = 854, 5859 years	Proper motion and properties of large- scale outflow features C and D	
HD 36030	B9 V	Maryeva et al. (2023) - Gal <u>https://doi.org/10.3390/</u>	T_{eff} = 11900 K, log g = 4.69 dex, v sin <i>i</i> = 15 km s ⁻¹ log (abundances) by number H=1, He=-1.75, C<-2.3, N<-1.9,O<-3.25	XTGrid/Tlusty modeling. Binarity confirmed.	

		galaxies11020055		
HD 174638 (β Lyr)	Interacting eclipsing close binary	Rustamov & Abdulkarimova (2020) - <u>AzAJ</u>	Period = 12.9411428 days (2016). Increment in orbital period by 19s per year.	

Stars in open clusters					
Object	Reference	Parameters	Comments		
GES 10341195-5813066	Morel et al. (2022) - A&A https://doi.org/ 10.1051/0004- 6361/202244112	$T_{eff} = 10520 \text{ K}$, log g = 4.18, V sin <i>i</i> = 281 km s ⁻¹ , RV = +5.8 km s ⁻¹ , y = 0.12, E(B-V) = 0.369	Cluster member of NGC 3293.		
GES 10341702-5811419	Morel et al. (2022) - A&A https://doi.org/ 10.1051/0004- 6361/202244112	$T_{eff} = 10730 \text{ K}, \log g = 4.05, \text{ V} \sin i = 175 \text{ km s}^{-1},$ RV = +9.33 km s ⁻¹ , y = 0.125, E(B-V) = 0.415	Cluster member of NGC 3293.		
GES 10341774-5809101	Morel et al. (2022) - A&A https://doi.org/ 10.1051/0004- 6361/202244112	$T_{eff} = 10880 \text{ K}, \log g = 4.31, \text{ V} \sin i = 150 \text{ km s}^{-1},$ RV = -16.43 km s ⁻¹ , y = 0.080, E(B-V) = 0.407	Cluster member of NGC 3293.		
GES 10342068-5814107	Morel et al. (2022) - A&A https://doi.org/ 10.1051/0004- 6361/202244112	$T_{eff} = 13571 \text{ K}, \log g = 4.18, \text{ V} \sin i = 180 \text{ km s}^{-1},$ RV = +0.83 km s ⁻¹ , y = 0.085, E(B-V) = 0.236	Cluster member of NGC 3293.		
GES 10342078-5813305	Morel et al. (2022) - A&A https://doi.org/ 10.1051/0004- 6361/202244112	$T_{eff} = 18221 \text{ K}, \log g = 4.03, \text{ V} \sin i = 122 \text{ km s}^{-1},$ RV = -18.21 km s ⁻¹ , y = 0.085, E(B-V) = 0.201	Cluster member of NGC 3293.		
GES 10342325-5808448	Morel et al. (2022) - A&A	$T_{\rm eff}$ = 13690 K, log g = 4.00, V sin <i>i</i> = 204 km s ⁻¹ ,	Cluster member of NGC 3293.		

<u>10.1051/0004-</u> <u>6361/202244112</u>		https://doi.org/ 10.1051/0004- 6361/202244112	RV = +4.93 km s ⁻¹ , y = 0.110, E(B-V) = 0.243	
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Open clusters					
Object	Reference	Parameters	Comments		
NGC 869/NGC 884(double cluster)	Granada et al. (2023) - Gal. https://doi.org/10.3390/galaxies11010037		Detection of active Be stars with Gaia G band.		
NGC 663	Granada et al. (2023) - Gal. <u>https://doi.org/10.3390/galaxies11010037</u>		Detection of active Be stars with Gaia G band.		
NGC 3293	Morel et al. (2022) - A&A https://doi.org/10.1051/0004- 6361/202244112	Cluster age ~20 Myr			
NGC 6834	Ruiz Diaz et al. (2021) - <u>BAAA</u>	E(B-V) = 0.66 mag.			
NGC 7419	Granada et al. (2023) - Gal. https://doi.org/10.3390/galaxies11010037		Detection of active Be stars with Gaia G band.		