






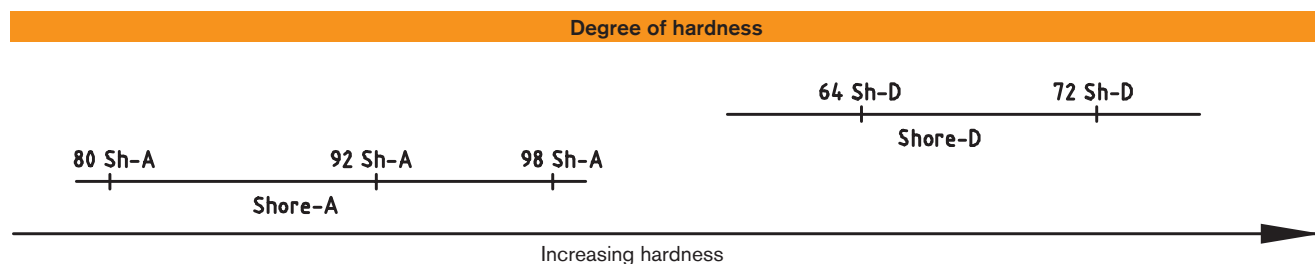


## Spiders

The elastic spiders of the GS line are available in five different kinds of Shore hardness, identified by colour, the material being soft to hard. Due to these five spiders with different kinds of Shore hardness it is easily possible to adjust the ROTEX® GS with regard to torsional stiffness and the vibration behaviour to the individual conditions of an application. The flexible prestress varies depending on the coupling size, the spiders/material and the production tolerances. Resulting herefrom is the axial plug-in force starting from low as a close sliding fit or with torsionally soft spider, respectively, to heavy with high prestress or torsionally rigid spider (see mounting instruction KTR-N 45510 at [www.ktr.com](http://www.ktr.com)).

Along with an increasing hardness of the spider the torques to be transmitted and the stiffness of the spider increase, too. Along with a reduced hardness of the spider the ability of compensating for displacements and damping the spider is increased.

Properties						
Description of spider hardness [Shore]	Identification Colour	Material	Perm. temperature range [°C]		Available for coupling size	Typical applications
			Permanent temperature	Max. temperature short-term		
80 Sh-A-GS		Polyurethane	- 50 to + 80	- 60 to + 120	size 5 to 24	– drives of electric measuring systems
92 Sh-A-GS		Polyurethane	- 40 to + 90	- 50 to + 120	size 5 to 55	– drives of electric measuring and control systems – main spindle drives
98 Sh-A-GS		Polyurethane	- 30 to + 90	- 40 to + 120	size 5 to 90	– positioning drives – main spindle drives – high load
64 Sh-D-H-GS		Hytrel	- 50 to + 120	- 60 to + 150	size 7 to 38	– planetary gears / backlash-free gears – higher torsion spring stiffness / high ambient temperatures
64 Sh-D-GS		Polyurethane	- 20 to + 110	- 30 to + 120	size 42 to 90	– higher load – higher torsion spring stiffness
72 Sh-D-H-GS		Hytrel	- 50 to + 120	- 60 to + 150	size 24 to 38	– very high torsion spring stiffness / high ambient temperature – very high load
72 Sh-D-GS		Polyurethane	- 20 to + 110	- 30 to + 120	size 42 to 90	– very high torsion spring stiffness – very high load



Spider material	Polyurethane			Hytrel
Degree of hardness	92 Shore-A	98 Shore-A	64 Shore-D	64 Shore-D
Relative Damping $\psi$ [-]	0,80	0,80	0,75	0,60
Resonance factor VR [-]	7,90	7,90	8,50	10,5